# ENERGY AND REVENUE ENRICHMENT ACT OF 2011

## HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

## COMMITTEE ON ENERGY AND COMMERCE

## HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

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# ENERGY AND REVENUE ENRICHMENT ACT OF 2011

**MONDAY, JUNE 13, 2011**

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND POWER,
COMMITTEE ON ENERGY AND COMMERCE,
*Washington, DC.*

The subcommittee met, pursuant to call, at 1:38 p.m., in Room 2123, Rayburn House Office Building, Hon. Ed Whitfield [chairman of the subcommittee] presiding.

Present: Representatives Whitfield, Walden, McKinley, Rush, and Waxman (ex officio).

Staff Present: Charlotte Baker, Press Secretary; Sean Bonyun, Deputy Communications Director; Anita Bradley, Sr. Policy Advisor to Chairman Emeritus; Cory Hicks, Policy Coordinator, Energy & Power; Kirby Howard, Legislative Clerk; Ben Lieberman, Counsel, Energy & Power; Dave McCarthy, Chief Counsel, Environment/Economy; Mary Neumayr, Counsel, Oversight/Energy; Andrew Powaleny, Press Assistant; Alex Yergin, Legislative Clerk; Jacqueline Cohen, Minority Counsel; Greg Dotson, Minority Energy and Environment Staff Director; Jocelyn Gutierrez, Minority DOE Detailee; and Caitlin Haberman, Minority Policy Analyst.

## OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. I would like to call this hearing to order.

Today, we have another hearing on the American Energy Initiative. This committee has had a series of hearings regarding the energy needs of the United States.

Today, also, we specifically will be looking at H.R. 2054, the Energy and Revenue Enrichment Act, which I have introduced on the House side and Senator McConnell and Senator Paul have introduced on the Senate side.

H.R. 2054 is a simple bill. It initiates a 2-year pilot program to re-enrich the uranium tails. It allows for the sale of the re-enriched uranium and deposits the money made into the Uranium Decontamination and Decommissioning Fund to be used for environmental cleanup.

I would also like to point out to those of you who may not be familiar that what we are talking about here is about 60,000 14-ton canisters located in two geographical areas of the country. There is about 40,000 of these canisters in Paducah, Kentucky, of depleted

uranium waste and about 20,000 of these canisters in Piketon, Ohio.

For the last 5 or 6 years, I, along with others, have had a lot of discussions with the Department of Energy about re-enriching this material, which would accomplish a number of things. Number one, it would provide additional revenue to the Federal Government; number two, it would help the environmental cleanup, certainly in Paducah as well as in Piketon, Ohio; and, number three, it would prolong the life of the uranium enrichment plant in Paducah, Kentucky, in which we have 1,200 jobs at stake.

So this is an important piece of legislation, and it makes a lot of sense for the reasons that I have already stated. It appears to be a win, win, win situation.

I would also like to remind everyone that this is a pilot project, a 2-year pilot project, which I think will give the Department of Energy adequate time to assess the situation, and it certainly would be of benefit to our country. So I look forward to the testimony of our witnesses today.

I would also at this time ask unanimous consent to introduce into the record a letter from the International President of the United Steelworkers, a letter from the Governor of Kentucky, a letter from the Mayor of Paducah, a letter from the County Judge of McCracken County, and a letter of support from United States Senator Rand Paul.

[The information appears at the conclusion of the hearing.]

Mr. WHITFIELD. I certainly want to welcome Senator McConnell being here with us today as well. As you know, he is the senior Senator from Kentucky and he is also the Republican Leader in the United States Senate, and he is quite familiar with this particular issue.

So Senator, we really appreciate your being here as well.

At this time, I would like to recognize Mr. Rush for his 5-minute opening statement.

[The prepared statement of Mr. Whitfield follows:]

## PREPARED STATEMENT OF HON. ED WHITFIELD

I would like to call this hearing to order.

In 2008, this Committee's Subcommittee on Oversight and Investigations held a hearing on the Department of Energy's inventory of depleted uranium hexafluoride canisters called "tails," where the Government Accountability Office (GAO) testified that reenriching these tails to secure the useable uranium would be worth around $7.6 billion, and maybe as much as $20 billion.

Since that time, this potential value has dropped to $4 billion, as the GAO will testify today. Simply put, the Department of Energy has failed to realize the value of the uranium tails and as a result they have already lost the taxpayers roughly $3.6 billion.

That is the reason we are here today considering my legislation—the Energy and Revenue Enrichment Act. DOE has talked to my office about these tails for 5 years and for 5 years we have not seen any results. All the while, this Committee has been waiting patiently, as have the taxpayers, for DOE to initiate a program that makes sense and should be a no-brainer.

The time for waiting is over. My bill is simple. It initiates a 2 year pilot program to re-enrich the uranium tails, allows for the sale of the re-enriched uranium, and deposits the money made into the Uranium Decontamination and Decommissioning Fund to be used for environmental cleanup.

Now, I want to direct your attention to the poster board located at the front of the room. Many people say a picture speaks for itself. This poster shows the amount of waste that we have been dealing with for the past 60 years. There are 40,000

of these canisters located in Paducah, Kentucky and 20,000 located in Piketon, Ohio. These canisters are scheduled to be converted to a less harmful substance and will be disposed of at an approved disposal facility. But, if this conversion occurs before re-enrichment, we will lose $4 billion.

In addition, my bill will reduce the amount of waste for disposal by 30,000 tons. This reduction in waste will save the government $200 million and result in less harm to the environment.

The bill does limit the pool of facilities where this work can occur. We do this for two reasons. First, there is contamination in these tails. The DOE sites are already similarly contaminated, so reenriching the tails at the DOE location will not further contaminate other sites. By contrast, new facilities will be hesitant to take many of these tails, further denying the taxpayer.

Second, the communities that have supported the government's reenrichment program for decades need these jobs. We will hear from the Steelworkers Unions about the equity involved in this project. They will explain that for nearly 60 years, these communities have been home to millions of tons of waste tails and now that the tails are recognized to have value, and they should be the ones to benefit. They aren't asking for a government handout, and they aren't asking for a bailout, all they are asking for is to let them finish the work, all in service to the taxpayer.

As I stated earlier, the uranium that will be extracted through this pilot program will generate roughly $4 billion, which my bill puts into the Uranium Decontamination and Decommissioning fund. That money will help clean up these DOE plant sites, which is so important to the communities where they are located, both for purposes of human health and safety and for economic development.

I am pleased we are making progress to make this bad situation better by cleaning up these sites and trying to repair injured families, but there is still 40 years worth of environmental cleanup work left to do at these sites. This money will go a long way in advancing this cleanup and it is logical for this money to be used there.

I now yield to the Ranking Member of the Subcommittee for his opening statement. I'd just like to thank the Ranking Member for working with me on getting the updated GAO report we will hear about today, and I hope he will join me as a supporter of this legislation.

Before I yield, I would like to insert letters of support from Governor Steve Beshear and the United Steelworkers Union's International President.

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## OPENING STATEMENT OF HON. BOBBY L. RUSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. RUSH. I want to thank you, Mr. Chairman; and I want to thank our distinguished guests, including our distinguished colleague from the other side, Senator McConnell, the Senate Minority Leader, as well as all the other guests for being here today. The minority leader's presence here today speaks to the importance of today's hearing on Chairman Whitfield's legislation to the good people of the great State of Kentucky.

Chairman Whitfield and I have had conversations about the Energy and Revenue Enrichment Act, better known as the Kentucky Enrichment Act; and I hope and expect that we will be able to move this bill through this committee in a collegial and a bipartisan manner.

Mr. Chairman, I also hope and expect that this can be a turning point toward a more collaborative and bipartisan approach for enacting other initiatives and other pieces of legislation in this committee that holds importance to both the majority and minority sides.

With that being said, the Energy and Revenue Enrichment Act will launch a pilot program to re-enrich uranium tails that are currently stockpiled in yards in Paducah, Kentucky, and Portsmouth, Ohio. These two plants hold up to 40,000 and 20,000 such tails, respectively. This bill will direct the Secretary of Energy to re-enrich

these tails and sell them at a profit for the government. As written, the bill would then redirect the revenue from the sale of these tails to the Uranium Decontamination and Decommissioning Fund for environmental cleanup.

This bill will also allow DOE to increase the domestic uranium supply from 10 percent to 15 percent for 4 calendar years.

Mr. Chairman, this hearing is also in response to a letter that you and I wrote to DOE back on March 1 asking the agency to update its 2008 report on DOE's conditional options for dealing with these uranium tails. Of course, we have DOE here today; and they will testify on different options for handling these tails, as well as the value of selling these tails in today's global market.

So, Mr. Chairman, I hope, sincerely hope, that my willingness to work with you on this issue is evident to all and that we will be able to move a bipartisan bill that will bring and maintain jobs for the good people of Kentucky and Ohio, while also ensuring that we have a transparent and open bidding process that brings forth the best value for the American taxpayers. Hopefully, Mr. Chairman, this bill will set the tone for a brand new era of collaboration and bipartisanship in addressing the important issues that all of our constituents face, yours and mine.

I want to thank you, Mr. Chairman, and I want to again thank our distinguished guests; and I look forward to hearing from our witnesses and the experts on this issue.

With that, I yield back the balance of my time.

Mr. WHITFIELD. Thank you very much, Mr. Rush.

Mr. Waxman, you are recognized for 5 minutes.

**OPENING STATEMENT OF HON. HENRY A WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. WAXMAN. Thank you, Mr. Chairman.

Today, the subcommittee is examining H.R. 2054, Chairman Whitfield's legislation to direct the Department of Energy to enter into a contract to enrich its depleted uranium tails and then sell the enriched uranium on the market. The way that this bill is currently drafted, the only entity that the DOE could contract with for these enrichment services is the United States Enrichment Corporation, or USEC.

When USEC was privatized in the 1990s, proponents said there would be many benefits from privatizing uranium enrichment. Wall Street underwriters and lawyers made millions of dollars on the transaction, but USEC failed to live up to many of these promises.

Within a few years of being privatized, USEC abandoned important national initiatives, announced layoffs of more than 800 workers, closed its Portsmouth facility in Ohio, sold off large amounts of uranium, whipsawing the domestic uranium industry.

With USEC's planned closure of its Paducah, Kentucky, facility in 2012 fast approaching, we are being asked to direct DOE to enter into a sole-source contract with USEC to process what has become a valuable asset: DOE's uranium tails.

DOE already has the authority under law to do this. So the question is, should DOE be forced by Congress to exercise this authority?

I am concerned this legislation is not carefully drafted to yield the best deal for the American taxpayer.

First, it is not clear how many hundreds of millions, maybe even billions, of dollars this contract would cost the American taxpayer. We should ask USEC about its capacity to execute this contract, but the company refused to testify, and the majority has not insisted that USEC send a witness today.

Second, by ordering DOE to enter into a sole-source contract, it is almost guaranteed that the government won't be able to negotiate the best deal for its uranium tails. The way this legislation is drafted, as long as the government receives one penny more in revenue than it costs to re-enrich the uranium, the contract would be deemed "economically viable" and the Secretary of Energy would have no discretion not to accept it.

Third, DOE has a number of options for managing its tails, as well as its excess enriched uranium. Another option, for example, would be to sell the tails to the highest bidder, which would avoid the costs of enrichment. This legislation charges forward with a highly prescriptive plan without giving DOE the authority to implement the best strategies for maximizing taxpayer value.

The legislation purports to raise money for the Uranium Enrichment Decontamination and Decommissioning Fund, also known as the D&D Fund. The D&D Fund is used to clean up contamination from years of uranium enrichment activities in Kentucky, Ohio, and Tennessee. Adequately funding these cleanup efforts is important, but because of the flaws in the bill, it is not at all clear that the fund will receive any significant funding under this legislation.

Moreover, responsibility for contributions needs to be apportioned fairly, with both the government and the utilities that purchased uranium paying their fair share. There is an estimated shortfall of more than $11 billion between the projected cleanup costs and authorized funding for the D&D Fund. Congress should reinstate the requirement that industry contribute to the D&D Fund.

Finally, even though the uranium tails have become a valuable resource in recent years, re-enriching them with old technology may not be the best approach.

Experts agree that the gaseous diffusion process, which was developed in World War II, is extremely inefficient and has high production costs. Gas centrifuge technology, which is currently being deployed in the U.S., uses about 5 percent of the electricity that is consumed by the gaseous diffusion technology used in Paducah. Using this more efficient technology for enriching the tails may generate more resources for the D&D Fund than using the old technology.

I hope we will be able to examine some of these issues today. I understand the chairman intends to mark up his legislation the day after tomorrow. That gives us a short period of time to refine this legislation. I hope the chairman will work with us to make this legislation a good deal for taxpayers.

I thank the witnesses for appearing today, and I look forward to their testimony.

Mr. WHITFIELD. Thank you very much, Mr. Waxman.

Before I introduce Senator McConnell, I would like everyone to look at this. These are some of the canisters—each one of them weighs 14 tons—at Paducah, Kentucky; and the earliest ones have been there for 60 years. This has been an issue for 60 years on the best way and how do we clean up this material.

With that, at this time it is my pleasure to introduce our first witness. As I said, it is Senator Mitch McConnell, senior Senator of Kentucky and Republican Leader of the U.S. Senate, who has introduced similar legislation on the Senate side.

So, Senator McConnell, welcome. We appreciate your taking time to be with us this afternoon, and you are recognized for your opening statement.

**STATEMENT OF THE HON. MITCH MCCONNELL, A UNITED STATES SENATOR FROM THE COMMONWEALTH OF KENTUCKY**

Mr. MCCONNELL. Thank you very much, Mr. Chairman, Congressman Rush, and members of the subcommittee. I appreciate the opportunity to be here to talk about an issue that Congressman Whitfield and I have been dealing with for a long time. In fact, throughout my time in the Senate, this facility and its related issues have dominated a big part of my career and I know Congressman Whitfield's as well.

Where we are is we know this facility is going to be closed down. It has been located, as Congressman Whitfield said, along the Ohio River for nearly 60 years. It has enriched uranium for use in America's defense and commercial nuclear reactors. Today, Paducah is home to the only domestic facility enriching uranium, making it a critical component of our Nation's energy security.

The story of uranium enrichment in Paducah begins in 1950, when the site was selected for the construction of a new gaseous diffusion plant. For many years, uranium was enriched to support our national security and then to support our energy needs. However, after decades of work, it was revealed that many of these employees were exposed to deadly toxins. The Department of Energy failed to put certain protections in place for these workers, and it was up to Congress to set them right.

I wish I could say that the Department of Energy has been quick to recognize its shortcomings over the years and then move swiftly to correct them. The sad fact is they have not, regardless of which party controlled the Department. As a result, Chairman Whitfield and I have frequently been forced to step in and challenge the bureaucracy to live up to the law.

In the late 1990s, we learned about the dangers Paducah's workforce had been exposed to, and we adopted a law to make sure that the workers were compensated for their injuries. Early last decade, DOE had to be forced—literally forced against its will—to implement an effective worker health screening program for workers at Paducah, Portsmouth, and Oak Ridge, Tennessee.

Time and time again, DOE shortchanged cleanup efforts at the site, requiring Congress to find resources elsewhere to make up for their shortcomings. When DOE dragged its feet in implementing a law to convert uranium waste at the site, I helped secure passage of legislation to require groundbreaking on a site by a date certain—in other words, literally make them open the project by a

date certain. Even after passing two laws mandating action, DOE's efforts were still plagued with countless bureaucratic delays and disputes.

And 4 years ago, we asked the Department what its plans were for depleted uranium tails, the subject of this hearing here today; and here we are today again, 4 years later, asking why the Department does not have a plan that includes Paducah.

I don't want to sound like a broken record, but you can see why Congress' patience has worn a little thin while waiting for the Department to step up to do the responsible thing when it comes to these enrichment facilities. At this point, the Department has forfeited the benefit of the doubt.

The Department of Energy is in possession of 40,000 cylinders—the chairman just showed us a picture of it—in Paducah and 20,000 cylinders in Portsmouth containing roughly 700,000 metric tons of depleted uranium hexafluoride from former enrichment operations. The substances, more commonly known as tails, sitting in these cylinders, exposed to the elements, poses a myriad of health, safety, and environmental risks. Paducah has the capacity to convert this toxic substance into a more stable form for disposition, and that will be necessary at some point.

We can keep kicking the can down the road, but this is going to be necessary at some point.

However, it has also the capacity to re-enrich some of this material into marketable uranium, which could then be sold to benefit the taxpayers. I would ask those present here today to consider this scenario: You have materials right in your own backyard, you have facilities to turn it into a sought-after product worth at least $1 billion, maybe more, and a workforce trained and ready to do the work. Do you use that asset in a way that saves jobs, or do you let the Department slowly dispose of all of this valuable material and in the meantime 1,200 people collect unemployment? I know which option sounds like the common-sense solution to me.

As the chairman well knows, the unemployment rate in Kentucky is 10 percent, worse than the national unemployment rate of 9.1. There are 1,200 jobs that would be immediately eliminated by the plant closure. But that's not all. Hundreds of additional jobs in the area would be cut by a shuttered Paducah plant, potentially impacting the entire economy of far western Kentucky. I would hate to see in this current time of fiscal crisis and serious unemployment a missed opportunity for the government to keep people employed and reduce the deficit at the same time. Keep people employed and reduce the deficit at the same time. What is a better outcome than that?

I know these people. I have seen how hard they work. They are obviously concerned with their own employment, but they also want to help the country. Let's allow them to do that. At a time of fiscal crisis and double-digit unemployment, a plan to re-enrich these tails helps employ people and reduce our deficit. It has been a long time I have heard anything out of Washington that makes as much sense as that.

Everyone knows Kentucky is a coal State, which we are, but we are also a nuclear State. Paducah is a community that enthusiastically supports nuclear energy. Allowing the Paducah plant to close

in 2012 and waiting years for the Department of Energy to address what to do with the existing depleted uranium, I believe, is both shortsighted and irresponsible.

So let me be very clear. We are not asking for a government intervention; we are asking that the government live up to its responsibilities and properly utilize inventory and facilities it already owns, in the best interest of the taxpayers.

So I come here today not just as the Republican Leader of the Senate but as a concerned American. When it comes to nuclear energy, we have seen this administration abandon plans and millions in taxpayer dollars before without much consideration of the consequences. Take for example its unwillingness to follow through on the nuclear storage site Yucca Mountain, paralyzing further nuclear energy production in this country. We cannot let the Department turn its back on these facilities, these workers, or these communities again.

So that is why I am grateful to you, Mr. Chairman, for crafting the Energy and Revenue Enrichment Act to give the Department of Energy the flexibility it needs to temporarily re-enrich tails at Paducah and Portsmouth. I am happy to be the sponsor of that bill in the Senate, along with my colleague Rand Paul; and it is my hope that we can work with our counterparts in the House and Senate to find a fiscally responsible solution.

I want to thank you very much, Mr. Chairman, for the opportunity to be here and commend you once again for your extraordinary leadership on this subject. I don't know where we would be on this issue without Congressman Whitfield. So I thank you for what you have done, and let's continue to work on it together and see if we can get a solution not only for Kentucky but for the Nation. Thanks so much.

[The prepared statement of Senator McConnell follows:]

**STATEMENT BY**
**SENATE REPUBLICAN LEADER**
**MITCH MCCONNELL BEFORE THE**
**HOUSE SUBCOMMITTEE ON ENERGY AND POWER**
**JUNE 13, 2011**

I want to thank my friend, Chairman Whitfield, for the opportunity to testify before this subcommittee today on a subject that is not only important to Kentucky, but to the nation. It is my hope that the attention your committee is giving to the uranium enrichment issue will alert others to what he and I have been concerned about for some time – the urgent need to address our nation's nuclear energy infrastructure. Thank you again for your leadership on this issue.

Throughout my career as Senator from the Commonwealth of Kentucky, I have focused a great deal of attention on work conducted at the Paducah Gaseous Diffusion Plant in Paducah, Kentucky. Located along the Ohio River in western Kentucky, for nearly 60 years the Paducah Plant has enriched uranium for use in America's defense and commercial nuclear reactors. Today, Paducah is home to the only domestic facility enriching uranium, making it a critical component of our nation's energy security.

The story of uranium enrichment in Paducah begins in 1950, when the site was selected for the construction of a new gaseous diffusion plant. For many years, uranium was enriched to support our national security and then to support our energy needs. However, after decades of work it was revealed that many of these employees were exposed to deadly toxins. The Department of Energy failed to put certain protections in place for these workers and it was up to Congress to set them right.

I wish I could say that the Department of Energy has been quick to recognize its shortcomings, and then move swiftly to correct them. The sad fact is they have not – regardless of which party controlled the Department. As a result, Chairman Whitfield and I have frequently been forced to step in and challenge the bureaucracy to live up to the law.

In the late 1990s, we learned about the dangers Paducah's workforce had been exposed to and we adopted a law to make sure that the workers were compensated for their injuries. Early last decade, DOE had to be forced - against its will - to implement an effective worker health screening program for workers at Paducah, Portsmouth, Ohio, and Oak Ridge, Tennessee.

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And four years ago, we asked the Department what its plans were for depleted uranium "tails" and here we are today again asking why the Department does not have a plan that includes Paducah.

I don't want to sound like a broken record, but you can see why Congress's patience has worn thin while waiting for the Department to step up to do the responsible thing when it comes to these enrichment facilities. At this point, the Department has forfeited the benefit of the doubt.

The Department of Energy is in possession of 40,000 cylinders in Paducah and 20,000 cylinders in Portsmouth containing roughly 700,000 metric tons of depleted uranium hexafluoride from

former enrichment operations. The substance – more commonly known as tails - sitting in these cylinders, exposed to the elements, poses a myriad of health, safety and environmental risks. Paducah has the capacity to convert this toxic substance into a more stable form for disposition and that will be necessary at some point.

However, it also has the capacity to re-enrich some of this material into marketable uranium, which could then be sold to benefit the taxpayers. I would ask those present here today to consider this scenario: you have materials right in your own backyard, you have facilities to turn it into a sought-after product worth at least $1 billion, maybe more, and a workforce trained and ready to do the work. Do you use that asset in a way that saves jobs, or do you let the Department slowly dispose of ALL of this valuable material and in the mean time 1,200 people collect unemployment? I know which option sounds like the common sense solution to me.

As the Chairman well knows, the unemployment rate in Kentucky is at 10 percent, slightly worse than the national unemployment rate of 9.1 percent. There are 1,200 jobs that would be immediately eliminated by the plant closure. But that's not all. Hundreds of additional jobs in the area would be cut by a shuttered Paducah Plant, potentially impacting the entire economy of western Kentucky. I would hate to see, in this current time of fiscal crisis and serious unemployment, a missed opportunity for the government to keep people employed and reduce the deficit at the same time. What is a better outcome than that?

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I again I thank the Chairman and this committee for their time.

Mr. WHITFIELD. Senator McConnell, thank you very much. I know that you have a commitment at 2:00, but we do appreciate you coming over and giving your opening statement. I look forward to working with you on this legislation.

At this time, I would like to call up the witnesses for the second panel. We have Mr. Gene Aloise, with the Government Accountability Office, Director of Natural Resources and Environment; and we have the Honorable Daniel B. Poneman, who is the Deputy Secretary at the U.S. Department of Energy.

Gentlemen, we appreciate both of you being here today us today. We look forward to your testimony and thoughts on this issue.

Mr. Aloise, we will start with you.

## STATEMENTS OF GENE ALOISE, DIRECTOR OF NATURAL RESOURCES AND ENVIRONMENT, GOVERNMENT ACCOUNTABILITY OFFICE; AND THE HONORABLE DANIEL B. PONEMAN, DEPUTY SECRETARY, U.S. DEPARTMENT OF ENERGY

### STATEMENT OF GENE ALOISE

Mr. ALOISE. Mr. Chairman, ranking member, and members of the subcommittee, I am pleased to be here today to discuss DOE's options for its supply of depleted uranium, also known as tails.

As you know, since the 1940s, the government has been processing natural uranium into enriched uranium, which increases the concentration of the isotope uranium 235, making the material useful in nuclear weapons or power reactors. The production of enriched uranium over many decades has resulted in about 700,000 metric tons of leftover tails which are now stored at uranium enrichment plants in Portsmouth, Ohio, and Paducah, Kentucky.

Although the tails have historically been considered a waste product, increases in uranium prices may give DOE options to use some of the tails in ways that could provide revenue to the government. DOE's potential options include selling the tails as is, re-enriching them, or storing them indefinitely. While in our view DOE's legal authority to sell the tails as is is doubtful, DOE has the authority to carry out the re-enrichment and storage options.

According to DOE's comprehensive uranium management plan, DOE stated that it would consider selling the tails or re-enriching them. However, to date, DOE has not done so and apparently has no current plans to sell or re-enrich this material.

At current uranium prices, we estimate DOE's tails to have a net value of $4.2 billion. However, we would have to emphasize that this estimate is very sensitive to changing uranium prices, which recently have been volatile, as well as the availability of enrichment capacity.

Our estimate assumes the May, 2011, published uranium price of $160 per kilogram of natural uranium in the form of uranium hexafluoride and $153 per separative work unit, the standard measure of uranium enrichment services. Our estimate also assumes the capacity to re-enrich the higher concentration tails and subtracts the cost of the enrichment services. It also takes into account the cost savings DOE would realize from the reduction in the

amount of tails that needed conversion to a more stable form for storage as well as the cost of stabilizing any residual tails.

Based on 2010 total U.S. Demand for uranium, the total amount of natural uranium produced as a resulted of enriching the tails would be enough to supply all of the U.S. demand for about 3-and-a-half years.

Importantly, a sharp rise or fall in prices could greatly affect the value of the tails. For example, our March, 2008, report estimated that the tails had a net value of $7.6 billion. Prices for uranium have since fallen, resulting in the now-lower estimate of the value of the tails. Furthermore, there is no consensus among industry whether uranium prices will rise or fall in the future or the magnitude of any future price changes. Also, the introduction of additional uranium onto the market by the sale of large quantities of DOE's depleted natural or enriched uranium could lead to lower prices.

To help minimize the negative effects of DOE's sales on domestic uranium producers, DOE has limited its sales to no more than 10 percent of the domestic demand for uranium annually. However, this limit lengthens the time necessary to market DOE's uranium, increasing the time DOE is exposed to swings in the price of uranium. Also, the enrichment capacity for re-enriching tails may be limited, and the cost of enrichment services are uncertain.

Uncertainty about the future of uranium prices and the cost of availability of enrichment services makes it difficult to place a precise value on DOE's tails. As a result, it is possible that DOE could receive significantly more or less than the $4.2 billion we estimate the tails are currently worth.

In conclusion, Mr. Chairman, as was the case when we reported in March, 2008, the U.S. Government has an opportunity to gain some benefit from the material that once was considered a liability. However, it is unclear to us whether DOE can act quickly enough to changing market conditions to achieve the greatest possible value from its uranium inventories.

Mr. Chairman, that concludes my statement; and I would be happy to respond to any questions you or members of the subcommittee may have.

[The prepared statement of Mr. Aloise follows:]

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Energy and Power, Committee on Energy and Commerce, House of Representatives

For Release on Delivery
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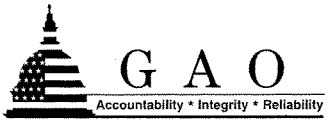
Monday, June 13, 2011

# NUCLEAR MATERIAL

# DOE's Depleted Uranium Tails Could Be a Source of Revenue for the Government

Statement of Gene Aloise, Director
Natural Resources and Environment




GAO-11-752T

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# Highlights

Highlights of GAO-11-752T, a testimony before the Subcommittee on Energy and Power, Committee on Energy and Commerce, House of Representatives

June 13, 2011

## NUCLEAR MATERIAL

## DOE's Depleted Uranium Tails Could Be a Source of Revenue for the Government

### Why GAO Did This Study

Since the 1940s, the Department of Energy (DOE) has been processing natural uranium into enriched uranium, which has a higher concentration of the isotope uranium-235 that can be used in nuclear weapons or reactors. This has resulted in over 700,000 metric tons of leftover depleted uranium, also known as "tails," that have varying residual concentrations of uranium-235. The tails are stored at DOE's uranium enrichment plants in Portsmouth, Ohio and Paducah, Kentucky. Although the tails have historically been considered a waste product, increases in uranium prices may give DOE options to use some of the tails in ways that could provide revenue to the government.

GAO's testimony is based on its March 2008 report (GAO-08-606R). GAO updated the analysis in its 2008 report to reflect current uranium prices and actions taken by DOE. The testimony focuses on (1) DOE's options for its tails and (2) the potential value of DOE's tails and factors that affect the value.

In its 2008 report, GAO suggested that Congress consider clarifying DOE's statutory authority to manage its tails. No action on this recommendation has been taken to date. Also, GAO recommended that DOE complete a comprehensive uranium management assessment. DOE issued a uranium management plan in December 2008 that addressed GAO's recommendation.

View GAO-11-752T or key components. For more information, contact Gene Aloise at (202) 512-3841 or aloisee@gao.gov.

### What GAO Found

DOE's potential options for its tails include selling the tails "as is," re-enriching the tails, or storing them indefinitely. DOE's current legal authority to sell its depleted uranium inventory "as is" is doubtful, but DOE generally has authority to carry out the other options.

- DOE's authority to sell the tails in their current unprocessed form is doubtful. Because of specific statutory language in 1996 legislation governing DOE's disposition of its uranium, DOE's authority to sell the tails in unprocessed form is doubtful, and under the rules of statutory construction, DOE likely lacks such authority. However, if Congress were to provide the department with the needed authority, firms such as nuclear power utilities and enrichment companies may be interested in purchasing these tails and re-enriching them as a source of nuclear fuel.
- DOE could contract to re-enrich the tails. Although DOE would have to pay for re-enrichment, it might obtain more value from selling the re-enriched uranium instead of the tails if its re-enrichment costs were less than the discount it would have to offer to sell the tails as is.
- DOE could store the tails indefinitely. This option conforms to an existing DOE plan to convert tails into a more stable form for long term storage, but storing the tails indefinitely could prevent DOE from obtaining the potentially large revenue resulting from sales at current high uranium prices.

DOE issued a comprehensive uranium management plan in December 2008 that stated that the department would consider selling depleted uranium or re-enriching it to realize best value for the government and that it would begin selling or re-enriching depleted uranium in 2009. However, to date, DOE has not sold or re-enriched any of its depleted uranium and, according to DOE officials, has no current plans to do so.

The potential value of DOE's depleted uranium tails is currently substantial, but changing market conditions could greatly affect the tails' value over time. Based on May 2011 uranium prices and enrichment costs and assuming sufficient re-enrichment capacity is available, GAO estimates the value of DOE's tails at $4.2 billion—about $3.4 billion less than GAO's March 2008 estimate. However, this estimate is very sensitive to changing uranium prices, which have dropped since GAO's March 2008 report was issued. GAO's estimate is also very sensitive to the availability of enrichment capacity. In particular, DOE would have to find a company with excess enrichment capacity beyond its current operations, which may be difficult if large amounts of enrichment processing were required.

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee:

Thank you for the opportunity to discuss our work on the Department of Energy's (DOE) inventory of depleted uranium as you consider options for using this inventory in ways that could benefit the U.S. government. As you know, since the 1940s the government has been processing natural uranium into enriched uranium. This increases the concentration of the isotope uranium-235, which is necessary to make the material useful in nuclear weapons or reactors. The generation of enriched uranium over many decades has resulted in approximately 700,000 metric tons of leftover depleted uranium, also known as "tails," that have varying residual concentrations of uranium-235 remaining. DOE stores these tails at its uranium enrichment plants in Portsmouth, Ohio, and Paducah, Kentucky. DOE is assessing its options on how to best manage this large accumulation of tails. Although the tails have historically been considered a waste product and an environmental liability, increases in uranium prices may give DOE options to use that portion of the tails with the highest residual concentrations of uranium-235 in ways that could be a source of revenue to the government.

My testimony today is based on our March 31, 2008, report to the House Committee on Energy and Commerce, the Senate Committee on Energy and Natural Resources, and the Chairman of the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce.[1] We also testified on this subject before the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce on April 3, 2008.[2] In our March 2008 report, we recommended that the Secretary of Energy develop a comprehensive uranium management assessment that should contain detailed information on the types and quantities of depleted, natural, and enriched uranium the department manages and an assessment of DOE's options for this material. Consistent with our recommendation, DOE issued a comprehensive uranium management plan in December 2008. This plan stated, among other things,

[1]GAO, Nuclear Material: DOE Has Several Potential Options for Dealing with Depleted Uranium Tails, Each of Which Could Benefit the Government, GAO-08-606R (Washington, D.C.: Mar. 31, 2008).

[2]GAO, Nuclear Material: Several Potential Options for Dealing with DOE's Depleted Uranium Tails Could Benefit the Government, GAO-08-613T (Washington, D.C.: Apr. 3, 2008).

that DOE would consider selling depleted uranium or re-enriching it to realize best value for the government and that it would begin selling or re-enriching depleted uranium in 2009. However, to date, DOE has not sold or re-enriched any of its depleted uranium, and, according to DOE officials, has no current plans to do so.

My testimony today discusses (1) DOE's potential options for beneficially reusing or indefinitely storing its tails and (2) the potential value of DOE's tails and factors that affect the value.

In preparing this testimony, we updated information from our prior report. Specifically, we obtained the most recent data on the quantities and uranium-235 concentrations of tails in DOE's inventory and uranium price data to update our model of the potential value of DOE's tails. We developed this model for our March 2008 report. The model uses standard formulas to determine the amounts of enriched uranium and tails produced from given quantities of uranium and enrichment services. The model also uses uranium price data that we obtained from nuclear industry trade publications. These data are commonly used in the nuclear industry as standard measures of the market price for uranium. We interviewed knowledgeable DOE officials to determine the extent to which these data are used by the department and the industry and determined that the data were sufficiently reliable for the purposes of our report. Our prior work on DOE's depleted uranium, as well as the work conducted for this statement, was performed in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

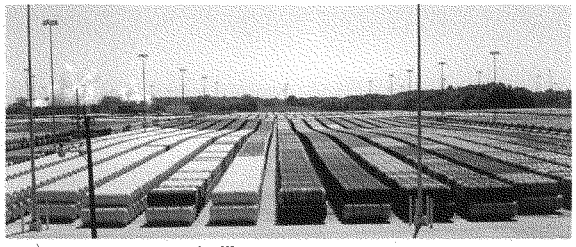
## Background

Since the 1940s, one mission of DOE and its predecessor agencies has been processing uranium as a source of nuclear material for defense and commercial purposes. A key step in this process is the enrichment of natural uranium, which increases its concentration of uranium-235, the isotope of uranium that undergoes fission to release enormous amounts of energy. Before it can be enriched, natural uranium must be chemically converted into uranium hexafluoride. The enrichment process results in two principal products: (1) enriched uranium hexafluoride, which can be further processed for specific uses, such as nuclear weapons or fuel for nuclear power plants; and (2) leftover "tails" of uranium hexafluoride.

These tails are also known as depleted uranium because the material is depleted in uranium-235 compared with natural uranium.[3]

Since 1993, uranium enrichment activities at DOE-owned uranium enrichment plants have been performed by the U.S. Enrichment Corporation (USEC), formerly a wholly owned government corporation that was privatized in 1998. However, DOE still maintains over 700,000 metric tons of depleted uranium tails in about 63,000 metal cylinders in storage yards at its Paducah, Kentucky, and Portsmouth, Ohio, enrichment plants (see figure 1). It must safely maintain these cylinders because the tails are dangerous to human health and the environment. Uranium hexafluoride is radioactive and forms extremely corrosive and potentially lethal compounds if it contacts water. In addition, DOE also maintains large inventories of natural and enriched uranium that are also surplus to the department's needs.

**Figure 1: Uranium Cylinder Storage Yard at DOE's Paducah Uranium Enrichment Plant**



Source: DOE.

[3]Uranium is categorized by concentration of uranium-235, expressed as a percentage "assay." Natural uranium has an assay of about 0.7 percent uranium-235. For use in a nuclear reactor or weapon, natural uranium must be enriched to increase its assay to a level required for its ultimate use. For example, low enriched uranium (LEU), which is used in commercial nuclear power reactors, typically has an assay of between 3 and 5 percent uranium-235. Highly enriched uranium (HEU), which is used in nuclear weapons, has an assay of greater than 20 percent uranium-235 and can have an assay of greater than 90 percent. The depleted uranium tails have varying assays below the 0.7 percent assay of natural uranium. DOE's tails range from less than 0.15 to about 0.66 percent uranium-235.

Tails have historically been considered a waste product because considerable enrichment processing is required to further extract the remaining useful quantities of uranium-235. In the past, low uranium prices meant that these enrichment services would cost more than the relatively small amount of uranium-235 extracted would be worth. However, an increase in uranium prices—from approximately $21 per kilogram of uranium in the form of uranium hexafluoride in November 2000 to about $160 per kilogram in May 2011—has potentially made it profitable to re-enrich some tails to further extract uranium-235. Even with the current higher uranium prices, however, only DOE's tails with higher concentrations of uranium-235 (at least 0.3 percent) could be profitably re-enriched, according to industry officials.

## DOE Potentially Has Options for the Tails but Has Not Implemented Its December 2008 Plan for Selling or Re-Enriching Them

DOE's potential options for its tails include selling the tails "as is," re-enriching them, or storing them indefinitely. However, DOE's legal authority to sell the tails in their current form is doubtful. We found that DOE generally has authority to carry out the re-enrichment and storage options. As we said earlier, DOE issued a comprehensive uranium management plan in December 2008 in response to a recommendation in our March 2008 report. In this plan, DOE stated that it would begin selling or re-enriching depleted uranium in 2009. However, to date, DOE has not done so and, according to DOE officials, has no current plans to sell or re-enrich this material.

### DOE's Legal Authority to Sell the Tails in Their Current Form Is Doubtful

While selling the tails in their current unprocessed form is a potential option, we believe that DOE's authority to conduct such sales is doubtful because of specific statutory language in legislation governing DOE's disposition of its uranium. In 1996, Congress enacted section 3112 of the USEC Privatization Act,[4] which limits DOE's general authority, under the Atomic Energy Act[5] or otherwise, to sell or transfer uranium. In particular, section 3112 explicitly bars DOE from selling or transferring "any uranium"—including but not specifically limited to certain forms of natural and enriched uranium—"except as consistent with this section." Section 3112 then specifies conditions for DOE's sale or transfer of natural and enriched uranium of various types, including conditions in section

[4]USEC Privatization Act, Pub. L. No. 104-134, § 3112, 110 Stat. 1321-344, 42 U.S.C. § 2297h-10.

[5]Atomic Energy Act of 1954, as amended, 42 U.S.C. §§ 2011 et seq.

3112(d) for sale of natural and low-enriched uranium from DOE's inventory. To ensure the domestic uranium market is not flooded with large amounts of government material, in section 3112(d), Congress required DOE to determine that any such inventory sales will not have a material adverse impact on the domestic uranium industry. Congress also required in section 3112(d) that DOE determine it will receive adequate payment—at least "fair market value"—if it sells this uranium and that DOE obtain a determination from the President that such materials are not necessary for national security.

However, neither section 3112(d) nor any other provision of section 3112 explicitly provides conditions for DOE to transfer or sell depleted uranium. Because section 3112(a) states that DOE may not "transfer or sell any uranium...except as consistent with this section," and because no other part of section 3112 sets out the conditions for DOE to transfer or sell depleted uranium, we believe that under rules of statutory construction, DOE likely lacks authority to sell the tails. While courts have not addressed this question before and thus the outcome is not free from doubt, this interpretation applies the plain language of the statute. It also respects the policy considerations and choices Congress made in 1996 when presented with the disposition of DOE's valuable uranium in a crowded and price-sensitive market. This reading of DOE's authority is consistent with how courts address changes in circumstances after a law is passed: Statutes written in comprehensive terms apply to unanticipated circumstances if the new circumstances reasonably fall within the scope of the plain language. Thus, under the current terms of section 3112, DOE's sale of its tails would be covered by the statute's general prohibition on sale of uranium, even if tails were not part of the universe Congress explicitly had in mind when it enacted the statute in 1996.[6]

Should Congress grant DOE the needed legal authority by amending the USEC Privatization Act or through other legislation, firms such as nuclear power utilities and enrichment companies would be interested in purchasing at least that portion of the tails with higher concentrations of extractable uranium-235 as a valuable source for nuclear fuel. For example, our March 2008 report stated that officials from 8 of 10 U.S. nuclear utilities indicated tentative interest in such a purchase. Individual utilities were often interested in limited quantities of DOE's tails because they were concerned about depending upon a single source to fulfill all of

[6]GAO's detailed legal analysis can be found in appendix I of GAO-08-606R.

their uranium requirements. Multiple utilities acting together as a consortium could mitigate these concerns and purchase larger quantities of tails. The report also noted that some enrichment firms also told us of some interest in purchasing portions of the inventory, but their anticipated excess enrichment capacity to process the tails into a marketable form affected both the quantity of tails they would purchase and the timing of any purchase.

Our March 2008 report noted that potential buyers suggested various commercial arrangements, including purchasing the tails through a competitive sale, such as an auction, or through negotiations with DOE. However, industry officials told us that buyers would discount, perhaps steeply, their offered prices to make buying tails attractive compared with purchasing natural uranium on the open market. That is, DOE might get a discounted price for the tails to compensate buyers for additional risks, such as rising enrichment costs or buyers' inability to obtain sufficient enrichment services. In addition, potential buyers noted that any purchase would depend on confirming certain information, such as that the tails were free of contaminants that could cause nuclear fuel production problems and that the cylinders containing the tails—some of which are 50 years old and may not meet transportation standards—could be safely shipped.

## DOE Could Re-enrich Its Tails

Although DOE's legal authority to sell the tails in their current form is doubtful, DOE has the general legal option of re-enriching the tails and then selling the resulting natural or enriched uranium. DOE would have to contract for enrichment services commercially because the department no longer operates enrichment facilities itself. Furthermore, DOE would have to find a company with excess enrichment capacity beyond its current operations, which may be particularly difficult if large amounts of enrichment processing were required. Within the United States today, for example, there are only two operating enrichment facilities: DOE's USEC-run Paducah, Kentucky, plant and the URENCO USA facility located near Eunice, New Mexico. In the case of the Paducah plant, almost all of its enrichment capacity is already being used through 2012, when the plant may stop operating. In the case of URENCO USA, the facility is still under construction and it is not yet operating at full capacity. Other companies are also constructing or planning to construct new enrichment facilities in the United States that potentially could be used to re-enrich DOE's tails.

Although DOE would have to pay for re-enrichment, it might obtain more value from selling the re-enriched uranium instead of the tails if its re-

enrichment costs were less than the discount it would have to offer to sell the tails as is. Representatives of enrichment firms with whom we spoke at the time of our 2008 report told us they would be interested in re-enriching the tails for a fee. The quantity of tails they would re-enrich annually would depend on the available excess enrichment capacity at their facilities.

Additionally, as noted above, prior to selling any natural or enriched uranium that results from re-enriching tails, DOE would be required under section 3112(d) of the USEC Privatization Act to determine that sale of the material would not have a material adverse impact on the domestic uranium industry and that the price paid to DOE would provide at least fair market value. Section 3112(d) also would require DOE to obtain the President's determination that the material is not needed for national security.

## DOE Could Store the Tails

DOE also has the general legal option to store the tails indefinitely. In the late 1990s, when relatively low uranium prices meant that tails were viewed as waste, DOE developed a plan for the safe, long-term storage of the material. DOE has constructed new facilities at its Paducah plant and its closed Portsmouth uranium enrichment plant to chemically convert its tails into a more stable and safer uranium compound that is suitable for long-term storage. The facilities are currently undergoing system checks and once they begin operating in 2011, DOE estimates it will take approximately 25 years to convert its existing tails inventory.

As our March 2008 report noted, storing the tails indefinitely could prevent DOE from taking advantage of the large increase in uranium prices to obtain potentially large amounts of revenue from material that was once viewed as waste. DOE would also continue to incur costs associated with storing and maintaining the cylinders containing the tails. These costs amount to about $4 million annually. Sale (if authorized) or re-enrichment of some of DOE's tails could also reduce the amount of tails that would need to be converted and, thereby, save DOE some conversion costs.

Moreover, once the tails were converted into a more stable form of uranium oxide, DOE's costs to re-enrich the tails would be higher if it later decided to pursue this approach. This is because of the cost of converting the uranium oxide back to uranium hexafluoride, a step that would be required for re-enrichment. However, according to DOE officials, after the conversion plants begin to operate, the plants would first convert DOE's lower concentration tails because they most likely would not be

economically worthwhile to re-enrich. This would give DOE additional time to sell or re-enrich the more valuable higher-concentration tails.

## DOE Has Not Implemented Its December 2008 Plan to Sell or Re-enrich Some of Its Tails

Our March 2008 report noted that DOE had been developing a plan since 2005 to sell excess uranium from across its inventories of depleted, natural, and enriched uranium to generate revenues for the U.S. Treasury. In March 2008, DOE issued a policy statement that established a general framework for how DOE plans to manage its inventories. However, we noted that the March 2008 policy statement was not a comprehensive assessment of the sales, re-enrichment, or storage options for DOE's tails. The policy statement lacked specific information on the types and quantities of uranium that the department has in its inventory. Furthermore, the policy statement did not discuss whether it would be more advantageous to sell the higher-concentration tails as is (if authorized) or to re-enrich them. It also did not contain details on when any sales or re-enrichment may occur or DOE's legal authority to carry out those options under section 3112 of the USEC Privatization Act. It also lacked information on the uranium market conditions that would influence any DOE decision to potentially sell or re-enrich tails. Further, it did not analyze the impact of such a decision on the domestic uranium industry, and it did not provide guidance on how a decision should be altered in the event that market conditions change. Although the policy statement stated that DOE would identify categories of tails that have the greatest potential market value and that the department would conduct cost-benefit analyses to determine what circumstances would justify re-enriching and/or selling potentially valuable tails, it did not have specific milestones for doing so. Instead, the policy statement stated that this effort will occur "in the near future."

Our March 2008 report therefore recommended that DOE should complete the development of a comprehensive uranium management assessment as soon as possible. We stated that the assessment should contain detailed information on the types and quantities of depleted, natural, and enriched uranium the department currently manages and a comprehensive assessment of DOE's options for this material, including the department's authority to implement these options. Furthermore, we stated that the assessment should analyze the impact of each of these options on the domestic uranium industry and provide details on how implementation of any of these options should be adjusted in the event that market conditions change.

In December 2008, DOE issued an "Excess Uranium Inventory Management Plan." Among other things, the plan states that DOE would begin selling or re-enriching depleted uranium in 2009. However, the department has not, to date, sold or re-enriched any of its depleted uranium. According to DOE officials, the department currently has no plans to sell or re-enrich this material.

## DOE's Depleted Uranium Inventory Is Potentially Worth Billions of Dollars, but Many Factors Could Greatly Change Its Value

At current uranium prices, we estimate DOE's tails to have a net value of $4.2 billion; however, we would like to emphasize that this estimate is very sensitive to changing uranium prices, which recently have been extremely volatile, as well as to the availability of enrichment capacity. This estimate assumes the May 2011 published uranium price of $160 per kilogram of natural uranium in the form of uranium hexafluoride and $153 per separative work unit—the standard measure of uranium enrichment services. Our model also assumes the capacity to re-enrich the higher-concentration tails and subtracts the costs of the needed enrichment services. It also takes into account the cost savings DOE would realize from reductions in the amount of tails that needed conversion to a more stable form for storage, as well as the costs to convert any residual tails.

As noted above, this estimate is very sensitive to price variations for uranium as well as to the availability of enrichment services. Uranium prices are very volatile, and a sharp rise or fall in prices could greatly affect the value of the tails. For example, our March 2008 report estimated the tails had a net value of $7.6 billion. This estimate was based on the February 2008 published uranium price of $200 per kilogram of natural uranium and $145 per separative work unit. Prices for uranium have since fallen from $200 per kilogram of natural uranium to $160 per kilogram. There is no consensus among industry players whether uranium prices will fall or rise in the future or on the magnitude of any future price changes. Furthermore, the introduction of additional uranium onto the market by the sale of large quantities of DOE depleted, natural, or enriched uranium—assuming DOE obtains authority to sell depleted uranium—could also lead to lower uranium prices. Therefore, according to DOE's uranium management plan, DOE is limited to selling no more than 10 percent of the domestic demand for uranium annually. This is intended to help achieve DOE's goal of minimizing the negative effects of DOE's sales on domestic uranium producers. However, this limit lengthens the time necessary to market DOE's uranium, increasing the time the department is exposed to uranium price volatility. These factors all result in great uncertainty of the valuation of DOE's tails.

In addition, the enrichment capacity available for re-enriching tails may be limited, and the costs of these enrichment services are uncertain. For example, at the time of our March 2008 report, USEC only had a small amount of excess enrichment capacity at its Paducah plant. If it used the spare capacity, USEC would only be able to re-enrich about 14 percent of DOE's most economically attractive tails between now and the possible closing of the plant in 2012. Although USEC officials told us at the time of our March 2008 report that the company was willing to explore options to extend the Paducah plant's operations beyond 2012 and dedicate Paducah's capacity solely to re-enriching DOE's tails after this point, negotiations between the company and DOE would be needed to determine the enrichment costs that would be paid by DOE. The Paducah plant uses a technology developed in the 1940s that results in relatively high production costs. Even if the Paducah plant were to be dedicated entirely to re-enriching DOE tails after 2012, over a decade would be required to complete the work because of limitations on the annual volume of tails that can be physically processed by the plant. This lengthy period of time would expose DOE to risks of uranium price fluctuations and increasing maintenance costs.

USEC and other companies are constructing or planning to construct enrichment plants in the United States that utilize newer, lower-cost technology. However, these facilities are not expected to be completed until some time over the next decade. It is unclear exactly when these facilities would be fully operating, the extent to which they will have excess enrichment capacity to re-enrich DOE's tails, and what enrichment costs DOE could expect to pay. For example, the size of the fee DOE may have to pay an enrichment company to re-enrich its tails would be subject to negotiation between DOE and the company.

In summary, as was the case when we reported in March 2008, the U.S. government has an opportunity to gain some benefit from material that was once considered a liability. Under current law, however, one potential avenue for dealing with DOE's depleted uranium tails—sale of the material in its current form—is likely closed to the department. Obtaining legal authority from Congress to sell depleted uranium under USEC Privatization Act section 3112 or other legislation would provide the department with an additional option in determining the best course of action to obtain the maximum financial benefit from its tails. Our March 2008 report therefore suggested that Congress consider clarifying DOE's statutory authority to manage depleted uranium, under the USEC Privatization Act or other legislation, including explicit direction about whether and how DOE may sell or transfer the tails. Depending on the

terms of such legislation, a sale of DOE's tails could reap significant benefits for the government because of the potentially large amount of revenue that could be obtained. In any event, enacting explicit provisions regarding DOE's disposition of depleted uranium would provide stakeholders with welcome legal clarity and help avoid litigation that could interrupt DOE's efforts to obtain maximum value for the tails.

DOE's issuance of a comprehensive uranium management plan in December 2008 provided welcome clarity on the department's plans for marketing its uranium. Unfortunately, DOE has failed to follow-through with the actions laid out in its plan. By not following its plan to sell or re-enrich some its tails beginning in 2009, DOE has increased uncertainty in the uranium market about its ultimate plans for its depleted uranium tails. In addition, DOE continues to be unable to quickly react to changing market conditions to achieve the greatest possible value from its uranium inventories.

Chairman Whitfield, Ranking Member Rush, and Members of the Subcommittee, this completes my prepared statement. I would be happy to respond to any questions you or other Members of the Subcommittee may have at this time.

## GAO Contact and Staff Acknowledgments

If you have any questions or need additional information, please contact Gene Aloise at (202) 512-3841 or aloisee@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this statement. Major contributors to this statement were Ryan T. Coles (Assistant Director), Antoinette Capaccio, Karen Keegan, and Susan Sawtelle.

Mr. WHITFIELD. Thank you very much, Mr. Aloise.

At this time, I would like to recognize Mr. Poneman from the Department of Energy. You are recognized for 5 minutes.

**STATEMENT OF THE HONORABLE DANIEL B. PONEMAN**

Mr. PONEMAN. Thank you, Mr. Chairman. Thank you, Ranking Member Rush and distinguished members of the committee. I appreciate this opportunity to appear before you to comment on the Energy and Revenue Enrichment Act of 2011 and to provide information on the management and disposition of the Department of Energy's depleted uranium.

The Department holds a significant inventory of uranium in various forms, including highly enriched uranium, low enriched uranium, natural uranium, and depleted uranium hexafluoride, all of which must be actively managed. The majority of this inventory is depleted uranium the Department plans to process and dispose of as waste.

The uranium equivalent contained in the remaining inventory corresponds to almost 3 years of supply requirements for U.S. Nuclear power plants. This uranium has both monetary value and can help achieve vital departmental missions in maintaining our domestic nuclear fuel infrastructure. Much of the inventory requires further processing before it would be suitable for commercial use.

The Department's depleted uranium hexafluoride came from the government's prior uranium enrichment activities. This material would require additional processing.

The portion of this material with higher assay levels that is potentially marketable in its current form is subject to the market price of uranium. This uranium could constitute at least 10 percent of DOE's total inventory of depleted uranium hexafluoride.

The Department has broad authority under the Atomic Energy Act to sell, transfer, dispose of, or utilize its inventories of uranium. The Department must act consistently with other relevant statutory provisions, including section 3112 of the USEC Privatization Act. Section 3112 imposes limitations on certain transactions, including the sale and transfer of uranium to certain domestic users. Under this section, the Secretary of Energy must determine that a proposed sale or transfer of uranium "will not have an adverse material impact on the domestic uranium mining conversion or enrichment industry."

The Department believes that introducing departmental inventories to the domestic market in amounts of no more than 10 percent of the average annual domestic demand would not have an adverse material impact on domestic uranium industries. The 10 percent guideline is in fact one of industry's own recommendations regarding DOE's uranium management. However, we anticipate that in a given year the Department may introduce less than that amount into the domestic market and in some years more for certain special purposes. Regardless of whether a transfer is above or below 10 percent, covered transactions must comply with section 3112.

Within the Department, the Offices of Nuclear Energy, Environmental Management, and the National Nuclear Security Administration are collectively responsible for uranium inventories. These

offices coordinate transactions that are planned or under current or future consideration for disposition of DOE's uranium.

They also developed the Department's excess uranium inventory management plan, which provides a strategy for the sale or other disposition of this uranium. The Department is committed that its management of excess uranium inventories, one, complies with all legal requirements; two, maintains sufficient uranium inventories at all times; and, three, supports a strong domestic nuclear industry.

DOE has established priorities for the transfer of uranium through 2013. This March, Secretary Chu announced DOE's determination and market impact analysis authorizing uranium transfers to fund accelerated cleanup activities at the Portsmouth site in Piketon, Ohio. The determination found that the proposed transfers will not have an adverse impact on the domestic uranium industry. The total proposed transfers through 2013 are approximately 2,000 metric tons of uranium per year, or about 10 percent of the U.S. reactor demand.

We understand that H.R. 2054 seeks to enrich the Department's high assay depleted uranium hexafluoride to a usable form of uranium, funding the enrichment through the sale of the enriched material, assuming title to and responsibility for disposition of depleted uranium or a transfer of a portion of the enriched material in exchange for enrichment services. The amount of funding needed to enrich depleted uranium tails is significant and not currently within the overall priorities for the Department as supported by the President's budget. As acknowledged in the legislation, transfers of uranium for enrichment might lead to a volume in excess of our annual guideline of no more than 10 percent of uranium requirements at domestic commercial reactors.

We also believe certain provisions of the bill, while well-intentioned, may complicate the Department's ability to meet its own missions. One of our objectives is to maintain sufficient uranium inventories at all times to meet the Department's current and foreseeable needs. Specifically, by funding enrichment services through the transfer of the enriched uranium, the bill might impair our ability to meet mission priorities such as national defense programs requiring domestic origin uranium. Also, several sections of the bill appear to grant the Department authorities it already has. The appearance of grants of authorities in H.R. 2054 could lead to confusion over the Department's existing authorities.

In conclusion, in considering the management and disposition of the Department's uranium inventory, including enriching high assay depleted uranium tails, a variety of factors need careful assessment.

Thank you for the opportunity to testify. I look forward to answering any questions you have.

[The prepared statement of Mr. Poneman follows:]

**Statement of Daniel Poneman**
**Deputy Secretary of Energy**
**U.S. Department of Energy**

**before the**
**House Energy and Commerce Committee on**

**H.R. 2054, the Energy and Revenue Enrichment Act of 2011**

**June 13, 2011**

**Introduction**

Thank you, Mr. Chairman, Ranking Member Waxman, and Members of the Committee. I appreciate this opportunity to appear before you and comment on legislation under consideration by the Committee, as well as to provide information on management and disposition of the Department of Energy's depleted uranium.

The Administration continues to view nuclear power as an important element in its strategy to increase energy security and combat climate change. We join the international community in taking of stock of the lessons learned from the impact of the tragic earthquake and tsunami affecting nuclear power plants in Japan. We believe that nuclear power's contribution as a reliable source of safe and secure clean, carbon-free nuclear energy in the United States will be further enhanced by implementing the lessons learned from Japan relevant to our domestic nuclear power plants. The Department also sees the necessity of managing its uranium inventory in a manner that is consistent with and supportive of the maintenance of a strong domestic nuclear industry while at the same time supporting Departmental missions and objectives.

**Management of the Department's Excess Uranium Inventory**

I would like to start by providing the Committee with an overview of the Department's uranium inventory and the policies and procedures that guide the management and disposition of that inventory. The Department of Energy holds a significant inventory of uranium in various forms including highly enriched uranium ("HEU"), low enriched uranium ("LEU"), natural or normal uranium, and depleted uranium hexafluoride, all of which must be actively managed. The majority of this inventory is depleted uranium the Department plans to process through recently constructed conversion facilities and dispose of as waste. The uranium equivalent contained in the remaining inventory corresponds to almost three years of supply requirements for U.S. nuclear power plants. This uranium is a valuable asset both in its monetary value and in the role it could play in achieving vital Departmental missions and in maintaining a healthy domestic nuclear fuel infrastructure. A significant amount of this inventory requires further processing before it is considered suitable for commercial use. Consistent with applicable law the Department manages the release of uranium inventories in a manner that avoids adverse material impact on domestic uranium miners, converters, and enrichers.

The Department's depleted uranium hexafluoride was generated from the government's prior uranium enrichment activities. Making this depleted uranium hexafluoride useable would require additional processing, depending on the uranium's assay level and degree of contamination. The portion of this material with higher

assay levels potentially marketable in its current form is subject to the market price of uranium. This uranium could constitute at least 10 percent of DOE's total inventory of depleted uranium hexafluoride.

The Department has broad authority under the Atomic Energy Act (AEA), as amended, to sell, transfer, dispose or otherwise utilize its inventories of depleted, natural, and enriched uranium. In exercising this authority, the Department must act consistently with other relevant statutory provisions, including the National Environmental Policy Act and section 3112 of the USEC Privatization Act. Section 3112 imposes limitations on certain specified transactions, including the sale and transfer of natural or enriched uranium to certain domestic end users of material from the Department's inventory. Under this section, the Secretary of Energy must determine that a proposed sale or transfer of natural or enriched uranium, with the exception of certain sales to select non-commercial entities or for national security purposes, "will not have an adverse material impact on the domestic uranium mining, conversion, or enrichment industry."

The Department believes, as a general guideline, that the introduction into the domestic market of uranium from Departmental inventories in amounts that do not exceed 10 percent of average annual domestic demand (approximately 2,000 metric tons of uranium or 5 million pounds of U3O8) in any one-year period would not have an adverse material impact on the domestic uranium industry. The 10 percent guideline was in fact one of industry's recommendations regarding the Department's management of its uranium. The Department, however, anticipates that in any given

year it may introduce less than that amount into the domestic market and that in some years it may introduce more for certain special purposes. Regardless of whether a particular transfer or sale is above or below the 10 percent guideline, if it is a transaction that is covered by section 3112(d), the Department conducts the requisite analysis and the Secretary must determine that the transfer or sale will not have an adverse material impact on the domestic uranium mining, conversion, or enrichment industries.

Within the Department, the Office of Nuclear Energy (NE), the Office of Environmental Management (EM), and the National Nuclear Security Administration (NNSA) are collectively responsible for these uranium inventories. These offices coordinate the identification of transactions that are planned or under consideration, or that may be considered by DOE in the future, for disposition of DOE's uranium. These same offices developed the Department's Excess Uranium Inventory Management Plan (the Plan), which provides for a strategy for the sale or other disposition of this uranium. The Department is committed to managing its excess uranium inventories in a manner that: (1) complies with all applicable legal requirements; (2) maintains sufficient uranium inventories at all times to meet the current and reasonably foreseeable needs of DOE missions; and (3) supports the maintenance of a strong domestic nuclear industry.

DOE has established priorities for the transfer of uranium through 2013. On March 2, 2011, Secretary Chu announced that DOE has issued a determination and market impact analysis authorizing uranium transfers to fund accelerated cleanup activities at the

Portsmouth Site in Piketon, Ohio. The Determination found that the proposed transfers will not have an adverse material impact on the domestic uranium industries. The total proposed Department transfers through calendar 2013, including scheduled transfers by NA, are approximately 2,000 metric tons of uranium per year, or about 10 percent of U.S. reactor demand, consistent with the principles and policies set forth in the Plan.

**Comments on H.R. 2054**

We understand that the Energy and Revenue Enrichment Act of 2011, H.R. 2054, seeks to realize value through the enrichment of the Department's high assay depleted uranium hexafluoride to a useable form of uranium, funding the enrichment through the sale of the enriched material, assuming title to and responsibility for disposition of depleted uranium, or a transfer of a portion of the enriched material in exchange for the enrichment services. The amount of funding needed to enrich depleted uranium tails is significant and not currently within the overall priorities for the Department as supported by the President's Budget. As acknowledged in the legislation, transfers of uranium for enrichment might lead to a volume of uranium transfers to the commercial market in excess of our annual guideline of no more than 10 percent of uranium requirements at domestic commercial reactors.

We also believe certain provisions of the bill, while well intentioned, may complicate the Department's ability to meet its own missions. An objective of the Department is to maintain sufficient uranium inventories at all times to meet the current and reasonably

foreseeable needs of Departmental missions. Specifically, by funding enrichment services through the transfer of the enriched uranium, the bill might impair the Department's ability to use this material to meet mission priorities, e.g., use in national defense programs requiring domestic origin uranium.

Also, several sections of the bill appear to grant the Department authorities it already has. The appearance of grants of authorities in this legislation could lead to confusion over the Department's existing authorities.

**Conclusion**

In considering the management and disposition of the Department's uranium inventory, including enriching the Department's high assay depleted uranium tails, a variety of factors need to be assessed, including DOE's mission needs, energy security, other statutory limitations and guidelines on the Department's disposition actions, and the flexibility to respond to a changing uranium market.

Thank you for this opportunity to testify before you. I look forward to answering your questions and working with the Committee to achieve the Administration's goals of utilizing the value of our valuable uranium assets in a manner that meets energy security needs, reduces the nation's carbon emissions, and supports skilled jobs for American workers.

Mr. WHITFIELD. Thank you, Mr. Poneman, for your testimony and taking the time to be here.

When I listened to Mr. Waxman's opening statement, he almost convinced me to oppose this legislation. But when you look into the depth of this legislation and the real accomplishment of this legislation, it is very clear that this is an answer to a significant problem.

Number one, it is not going to cost the government any money to implement this legislation. Number two, it is going to create revenue for the government. Number three, it is going to save 1,200 jobs. Number four, it is going to expedite the cleanup of the canisters, some of which have been there for 60 years.

Now, I understand the requirement to certify that we are not going to damage the uranium mining industry; and that 10 percent ceiling that you referred to, that is not in statute per se, is it? That is a judgment that the Department made; is that correct?

Mr. PONEMAN. Mr. Chairman, that is a guideline that is our interpretation of the statute. You are correct.

Mr. WHITFIELD. Right. It is in the statute that you have to certify it won't be damaging to the uranium industry?

Mr. PONEMAN. Right.

Mr. WHITFIELD. And you all have determined that you can sell up to 10 percent of the annual need without doing that.

And I would just say to you that this legislation is a pilot project, and we simply raise it from 10 to 15 for that period of time.

Another point that you touched on was your concern about providing sufficient supplies for the national defense. You and I know that the only other place that is enriching any uranium in America is in New Mexico, and it is not fully in business yet, is it? Aren't they still undergoing trials?

Mr. PONEMAN. I think they are operating, sir. But it is a different plant with different ownership and different legal regime.

Mr. WHITFIELD. Well, a centrifuge, for one thing.

But when you look at the practical aspects of this, as we said, these things are 14-ton canisters. And if you start transporting them around the country, and they are contaminated to a degree—we know that because of recent reports—and the site at Paducah is already contaminated, correct?

Mr. PONEMAN. Yes, sir.

Mr. WHITFIELD. So, number one, moving 14-ton canisters around the country, say to New Mexico, would be quite costly, wouldn't it, to transport them?

Mr. PONEMAN. There clearly is a cost, Mr. Chairman, associated with the transport of the canisters.

Mr. WHITFIELD. And it would certainly contaminate that facility out there, I am assuming. What is your opinion on that?

Mr. PONEMAN. In other words, if you were to, Mr. Chairman, take the contaminated gas out of the canisters and inject it into some cascade, presumably something would have to be done with the contaminants you have taken out or, indeed, I suppose it could taint or otherwise deposit on the centrifuge rotors.

Mr. WHITFIELD. Yes. The bottom line is this: Yes, we could take those additional steps. It would certainly cost a lot of additional money. And I would think that the Department of Energy would

welcome this legislation, to be truthful about it, because it helps solve your problem and it helps solve our problem. It provides revenue. You and I know that there is a shortage of funds for the Decontamination and Decommissioning Fund. In fact, it is my understanding there is about $4 billion in the fund right now; and in order to clean it up completely, my understanding is it would be like $29 billion; is that correct?

Mr. PONEMAN. The full, sum total I couldn't tell you with specificity, but we are short.

Mr. WHITFIELD. But it is more money than we have?

Mr. PONEMAN. It is much more than we have. That is true, sir.

Mr. WHITFIELD. And at least this legislation would provide additional funding for that fund?

Mr. PONEMAN. Yes.

Mr. WHITFIELD. We know it could be done safely at Paducah. There is no question about that. The training and equipment is there, and there is no problem with it.

So I understand the Department of Energy's concerns, but I hope as we move forward with this we can keep our dialogue open, because it seems to me that we are trying to accomplish the goals that we have set for ourselves and DOE has set for itself.

Mr. PONEMAN. Thank you, Mr. Chairman.

If I may comment, there is much in what you say with which we wholeheartedly agree. I always find on tough issues it is always good to start with some first principles.

One of the first things you said, Mr. Chairman, was we have invested in this tremendous asset all throughout the Cold War. Indeed, Senator McConnell said the same thing when he sat before you. It is in our interest, it is our right and our obligation to optimize the value of that resource in which we have invested as a Nation. So I think the only question is the prudent way in which to do that.

I want to acknowledge Ranking Member Rush. I think this is something we can do in a bipartisan manner. Frankly, I know of few issues more than the nuclear issue on which we can so join.

So, really, Mr. Chairman, I think it comes down to how do we prudently do this, given all of the facts we have lying before us. We have this material: 60,000 of these cylinders; 40,000 in Paducah; 20,000 in Piketon, Ohio. And then the question presented is, now that uranium prices have reached a level that they didn't use to attain at which one can contemplate doing this, how do we do this in a manner that optimizes the value of that material to the American taxpayer?

So we have to take into account, A, the market—and, as Mr. Aloise noted, the market is a volatile thing, going up and down—and, B, we do have to be sensitive not only because the statute requires us under the USEC Privatization Act, but because it would not optimize the value to the American people if we were to dump all of this material at the same time because it would crash the market. Then you wouldn't get the value you are looking for. So we have to be measured in how we put this into the market.

Mr. WHITFIELD. That is why we put a 15 percent limit on it.

Mr. PONEMAN. That is why we have to be measured in how we put it.

And we also have to take into account the cost associated. See, up until now, we have been putting natural uranium which has a market out into the market. That has a value, and people just purchase it.

This, in order to gain the value, you have to get the assay back up to the natural uranium of 0.7 percent, so there is going to be a cost associated with that. How much the taxpayer gets is going to depend on netting out the revenue received from the cost to generate the valuable product.

So I think, Mr. Chairman, in short, the sentiments—clearly, the objectives you articulate—the national defense, the environmental protection, promoting jobs, and promoting the restart of the American industry—these are ones that we strongly agree with; and we would be very open to working with you on a dialogue to figure out a way to optimize these interests.

Mr. WHITFIELD. Thank you.

Mr. Rush, you are recognized for 5 minutes.

Mr. RUSH. Thank you, Mr. Chairman.

Mr. Poneman, in your opinion, DOE's opinion, how many companies have the capacity and the capability to re-enrich these tails as this legislation calls for?

Mr. PONEMAN. Well, Ranking Member, there are currently two operating facilities. We have, of course, the Paducah gaseous diffusion plant, and there is the facility in New Mexico that the chairman referred to. There is a third facility in Idaho that is behind that is in the process of—it has gotten a loan guarantee, and they are going to be building that one as well. But those would be the facilities in the United States that would have the capability to enrich uranium.

Mr. RUSH. This is an issue that there should be some bipartisanship on, that we can agree on, these nuclear matters. I want to see these uranium tails disposed of, and I want to see the American people gain something from the sale of them, if they are to be sold.

But my concern right now is there is no significant bipartisanship. There is bipartisanship that exists here, but it seems like we are rushing to get this done and we are trying to direct DOE, force DOE to do something that may not be in the interest of the American taxpayer in the long run.

You mentioned the fact that there would be some costs in terms of taking these tails and bringing them up to the level and cost of natural uranium; is that correct?

Mr. PONEMAN. Yes, sir.

Mr. RUSH. Do you think if, in fact, there is one of these companies that deals with this and if they were successful in terms of getting an agreement with the DOE that they should share some of the cost for bringing these tails up to where they are marketable?

Mr. PONEMAN. Mr. Ranking Member, I would say, since the material has a value, the American way, if I may say, to make sure that the American taxpayer gets the best value for that investment is to have it out to bid. And then whoever has the least cost production would be able to offer the best price to the Department of Energy. That would be how I recommend this go forward.

Mr. RUSH. So you are saying this should be competitively bid?

Mr. PONEMAN. I would say, if it were competitively bid, you would have a better chance of getting maximum taxpayer value from it.

Mr. RUSH. All right. And the absence of a competitive bidding process would have what kind of results, as far as you are concerned? If this bill were to go forward and become law without a provision for competitive bidding, what would be the results for DOE and the American taxpayer?

Mr. PONEMAN. Let me just say, sir, that there are a number of factors that one may wish to take into account.

I think the chairman is referring to the fact that the only unencumbered indigenous facility we have is Paducah. So there are, if you will, certain noneconomic factors that come into play. But if you are looking at a straight economic analysis, the optimal value to the U.S. taxpayer I think would come from a competitive bid.

Mr. RUSH. I yield back, Mr. Chairman.

Mr. WHITFIELD. I might just say that, in this legislation, we say, enter into a contract that the Secretary finds economically viable. So it is not like we are directing you to enter into a contract. It has to be economically viable. I would just say that the concern we have is contamination is a serious issue and the transportation costs are serious as far as being competitive.

At this time, I recognize the gentleman from Oregon, Mr. Walden, for 5 minutes.

Mr. WALDEN. Thank you very much, Mr. Chairman.

I am curious about these canisters, if I can use your chart here. I can see them up close. It looks like they are rusting. Is that something we ought to be concerned about, Mr. Poneman?

Mr. PONEMAN. I do believe—and my eyesight is not that good, sir, but I do believe the condition of the canisters is absolutely something that we need to be very mindful of and that they need to be continually monitored to be sure there is no risk.

Mr. WALDEN. As I look at that, I think of my own region, Hanford, which the Department of Energy has had jurisdiction over; and I heard echoes of that as I listened to Senator McConnell talk about what DOE has done over decades there, including we have Hanford, obviously, right next to the Columbia River. There is really bad stuff buried in tanks that leak, and I know DOE's involvement in cleanup activities there will probably go on for your lifetime and mine, and beyond that—and hopefully successfully, and sooner rather than later.

I am just curious. We have also got the chem-demil facility just across the river in my district for all of the chemical weapons storage. We are going through that on a regular time basis. Is one of the issues here you don't have or you have unclear authority to move forward on reprocessing this? I am trying to understand the GAO report and finding.

Mr. PONEMAN. There is, if I understand it correctly, Congressman, a difference of view. The United States Department of Energy believes that under the Atomic Energy Authority Act of 1954, as amended, we have adequate legal authority to use and dispose of that material. Mr. Aloise noted two actions he thought that we had authority for. Our general counsel tells me we have authority to do

all three, including the option that GAO has concerns about. So I do think we have the authority.

But if I may, sir, because I think you raise a very important problem, I have spent a lot of time out at Hanford. I have seen that beautiful Columbia River, and we are responsible for the 53 million gallons of tank waste out there. And we are trying our best so it is finished in our lifetime, sir. But we take this—it is not only a legal responsibility. It is a moral responsibility.

I feel the same way about the material at Paducah. You know, these people invested in creating the materials that defended us all throughout the Cold War. So I think we owe it to them to be responsible in stewarding that asset.

Mr. WALDEN. I do, too.

Obviously, there are people who have gone before both of us who didn't hold quite that same opinion, or chose to look the other way. We have got the down-winder issue. You have got the leaking tanks. You have gotten not always a straight story from the Federal Government when it has come to Hanford.

So I guess I look at this and say: How long does this sit here? What is its condition as we go forward? I tie the two because the chem-demil facility, we were concerned about degradation of those canisters. I realize they are not this. They were a chemical weapon. But the mustard gas and DX and other things there, it seems like we ought to get after this.

Mr. Aloise, talk to me about your report in terms of the conflict here in authorities.

Mr. ALOISE. Well, Congressman, there are basically three avenues DOE can go. They can sell the tails as is, they can re-enrich them and sell them, or they can store them. It is our view that they don't have the necessary authority to sell the tails as is. We are basing that on our read of the USEC Privatization Act.

Mr. WALDEN. If I may interrupt you for a second, this is where you and DOE disagree. You think you have the authority. You think they don't.

Mr. ALOISE. Right. It would be a very simple fix for the Congress to——

Mr. WALDEN. And this bill does that?

Mr. ALOISE. No. But we recommended in the past that Congress consider adding the words "depleted uranium" either to amending the USEC Privatization Act or some other piece of legislation to give DOE that authority.

But, as Mr. Poneman said, DOE believes they have that authority.

Mr. WALDEN. OK. And what other conflicts do you see here that hold them up from doing this?

Mr. ALOISE. It is just a policy call at this point.

Mr. PONEMAN. I would just add, Congressman, since I think it is directly apposite to your comment, precisely because we look at those vast fields of tanks, we have built in both Paducah and near Portsmouth what we call these DUF6 conversion facilities. And, up until recently, we thought we were going to disposition all of those canisters as waste. It is indeed one of the things that we have done to say, now that we have some value that is inherent in those can-

isters, we shouldn't just disposition all of it; we should look to see if we can get some value for the taxpayers.

Mr. WALDEN. Understood. So when you talk about disposition of waste, I assume that means storage? This reprocessing idea?

Mr. PONEMAN. What I am referring to is uranium hexafluoride is a very corrosive gas, sir; and, therefore, we want to turn it into a much more stable oxide form. That is the process that would happen in these so-called DUF conversion facilities.

Mr. WALDEN. My time has expired. Thank you, gentlemen, for your testimony; and thank you, Mr. Chairman.

Mr. WHITFIELD. Mr. Walden did raise one issue I would like to follow up on. The GAO said that it costs, just for the Paducah plant, like $4 million a year just to maintain the canisters.

Mr. RUSH. Mr. Chairman, I must object right now to the procedure. Mr. Waxman is here waiting.

Mr. WHITFIELD. Sorry. I just got so carried away.

Mr. WAXMAN. Mr. Chairman, I ask unanimous consent you may be given a minute.

Mr. WHITFIELD. Thank you very much.

I just want to know, is that $4 million annual cost correct or not?

Mr. PONEMAN. Actually, sir, overall, at Paducah, we are spending on the order of $140 million per year on the activities that we are doing out there. I don't know where the exact figure of $4 million comes from.

Mr. WHITFIELD. Thank you.

I recognize the gentleman from California for 5 minutes.

Mr. WAXMAN. Thank you, Mr. Chairman.

I am concerned about whether this bill gets the best deal for taxpayers. The bill requires DOE to enter into a contract with a company that has experience operating an enrichment plant under authorization of the Nuclear Regulatory Commission. Section 2 of the bill then defines an enrichment plant as a uranium enrichment plant owned by the Department of Energy. Mr. Aloise, can you tell me which enrichment facility would qualify? Is it just this one enrichment facility at Paducah that would qualify?

Mr. ALOISE. There is only one that runs a DOE facility.

Mr. WAXMAN. So it would uniquely benefit USEC. That is why I said in my opening statement that it would be helpful if USEC had been here to testify. If USEC were here, we could examine how they see themselves fitting into this legislation. Unfortunately, they refused to testify.

The bill directs DOE to enter into a contract that is economically viable. Those are the terms, economically viable. But section 3(a)(3) of the bill states that a contract shall be considered economically viable if "the costs to the U.S. of the re-enrichment are less than therevenue anticipated from the sale of the re-enriched uranium."

Mr. Poneman, if USEC proposed enriching the uranium tails at a cost which was one penny less than the revenue expected from the sale of the re-enriched uranium, would the contract be economically viable under this bill?

Mr. PONEMAN. Congressman, I was reading this language last night; and I concur that 3(a)(3), a one penny delta, would constitute viability. But, I must say, sir, that it seems to be somewhat incon-

sistent with some of the other language in the bill, so I was trying to reconcile it. But that clause certainly reads that way, sir.

Mr. WAXMAN. If this bill were to become law, would DOE have the option of refusing to enter into a contract that met this definition of economic viability, even though it provided so little return to the taxpayer?

Mr. PONEMAN. This is where I was struggling. I am a recovering lawyer, sir, but I don't practice law at the moment. There is other language that talks about this.

Mr. WAXMAN. We won't hold that against you. It is a problem shared by others.

Mr. PONEMAN. Thank you. In 3(a)(1), it says Secretary shall seeks to maximize the financial return to the Federal Government in negotiating the terms of such contract. I was trying to reconcile how to read that term in the context of 3(a)(3), and I was having some trouble, sir.

Mr. WAXMAN. So it doesn't appear this is giving DOE discretion. It sounds likes they are being mandated.

Mr. PONEMAN. Our concern is precisely that. Something that has been granted to the Department as a discretionary power that we have to maximize the taxpayer return would perhaps be inadvertently curtailed by this.

Mr. WAXMAN. Mr. Aloise, what safeguards do you see in this bill which would prevent USEC from overcharging DOE for the enrichment services?

Mr. ALOISE. We would hope that if this bill got passed DOE would implement it in a manner that would benefit the government much more than we have just discussed here.

Mr. WAXMAN. Well, USEC is a publicly traded company. It is obligated to its shareholders to maximize its profits. USEC will have no reason to do anything other than to charge the maximum possible price. That would be good for its investors, but it won't be good for the D&D Fund, the contaminated sites in Ohio, Kentucky, and Tennessee, or workers who engage in contamination cleanup.

It seems to me that forcing the DOE to enter into a contract under statutory language that prevents the Department from having sufficient leverage to negotiate a fair contract will not adequately protect the American taxpayers.

This bill is being touted as a way to fund the Uranium Decontamination and Decommissioning Fund and provide money to clean up the enrichment sites. The Energy Policy Act authorized contributions of $7.2 billion to clean up enrichment sites, and liability was apportioned between the government and the utilities that purchased uranium. In 2007, DOE said there was a difference of $11.9 billion between the projected cost of cleanup and funds authorized by the Energy Policy Act. Mr. Poneman, is there still such a huge discrepancy between the amount of available resources and the amount of resources needed to clean up these enrichment sites?

Mr. PONEMAN. Congressman, I can't give it to the penny, but there is still a significant shortfall, yes. That is why we have sought in the President's budget to renew the collection of those D&D contributions from the utilities.

Mr. WAXMAN. Has the administration proposed reinstating the industry contribution to the D&D Fund?

Mr. PONEMAN. Yes, sir.

Mr. WAXMAN. The fund is clearly underfunded. Congress has to take steps to make sure the environmental mess created by these enrichment sites is cleaned up. However, this bill does not guarantee that any money would be raised for the D&D funds. The people of Paducah and Piketon and Oak Ridge need assurances that their communities will be made whole. We need to provide for real funding for the D&D Fund, and it just makes sense that the utilities that benefited from enrichment activities pay their fair share.

I appreciate this opportunity to ask you questions. We may have additional questions. Either I will submit them in writing or, if the chairman permits and I am available, we will do a second round.

Mr. WHITFIELD. Thank you, Mr. Waxman.

It is time to recognize the gentleman from West Virginia, Mr. McKinley, for 5 minutes of questions.

Mr. MCKINLEY. Thank you, Mr. Chairman.

To the GAO, this report has just come out; is that correct?

Mr. ALOISE. The testimony today, issued today.

Mr. MCKINLEY. If you had any second thoughts, reconsideration, now that you finalized your report that would change your opinion about the revenue—potential revenue that could come in?

Mr. ALOISE. No, sir.

Mr. MCKINLEY. No, sir? OK.

Then to Mr. Poneman, please. You have had a chance, I suppose—have you read the report yet?

Mr. PONEMAN. The one from today?

Mr. MCKINLEY. Yes.

Mr. PONEMAN. No, sir, I have not.

Mr. MCKINLEY. From what you have heard in the testimony, do you have any disagreement with it?

Mr. PONEMAN. Just, Congressman, the one that I mentioned, which is that we believe that already under the 1954 Atomic Energy Act we possessed all authority we need within the Department to disposition this material.

Mr. MCKINLEY. I guess the focus I am on is more as a revenue.

Mr. PONEMAN. Oh——

Mr. MCKINLEY. What I am referencing is that this thing could generate 3 to 7 billion dollars.

Mr. PONEMAN. Actually, our assessments are different from that. I have to caveat that sir, because it is something that depends on a market that is constantly changing. But I think the numbers we have were on the order of 830 million——

Mr. MCKINLEY. Could you provide us then with some of your own—so we could compare the two with your analysis between that. If could you do that for us, please.

Mr. PONEMAN. I am happy to. It would have to be caveated by the market uncertainties and also by the cost of production of the separative work needed to get——

Mr. MCKINLEY. Thank you.

What I heard earlier in the testimony was some of those cylinders have been there as much as 60 years, certainly before your time and my time on it. What is your plan?

It seems like around here we criticize each other, the other side of the aisle, they are back across this side. Anyone puts a plan out;

everyone shoots it down. So here's a plan that raises revenue for the Federal Government 3 to 4 to 7 billion dollars.

Mr. PONEMAN. Right.

Mr. MCKINLEY. It protects 1,200 jobs, and it gets rid of a problem at a site where the degradation of the tanks and gets rid of some of the problems, the environmental issues, but you sound like you are opposed to this bill.

Mr. PONEMAN. Oh, sir, I did not mean to convey that. I said that I thought that the sentiments of the bill and the optimization of the value to the taxpayer are laudable things and objectives and all things that could be supported and the environmental protection and so forth we are strongly supportive.

Mr. MCKINLEY. You are supportive of this legislation?

Mr. PONEMAN. No, I said we are supportive of the purposes of——

Mr. MCKINLEY. What is your plan then?

Mr. PONEMAN. Our plan is to make sure that, number one, we continue to fulfill our mission to defend the Nation in terms of preserving the tritium and so forth that we need——

Mr. MCKINLEY. In concrete, not abstract. Here is a concrete plan to do something to generate revenue and protect jobs and clean up a site, and I want to know what is your concrete plan now to do that.

Mr. PONEMAN. Our concrete plan is to produce the tritium we need for the deterrent out of the material that we have already offered to exchange in the 2,000 tons that we are now putting into the market. The balance of that material is going into the existing obligations to decommission and decontamination——

Mr. MCKINLEY. Could you speak in the mic just a little bit better for me? I am having a hard time hearing you.

Mr. PONEMAN. Sorry.

First is the national security requirement. Second is the D&D obligations we have at Portsmouth. Then, with respect to the cylinders there in Paducah, we have a plan both to disposition that which does not have market value in the DUF6 conversion facility, and we are willing to work with the committee to find out a way to optimize the value to the taxpayer of the cylinders that have market value.

Mr. MCKINLEY. If we followed that plan—seemed pretty general still—how many of the cylinders would be gone from Paducah and Portsmouth?

Mr. PONEMAN. Oh, we need to look at the market, look at the cost of producing the separative work.

Mr. MCKINLEY. A year from now they could all still be there or 2 years they could all still be there, correct?

Mr. PONEMAN. This is something, Congressman, that——

Mr. MCKINLEY. And we wouldn't have the jobs associated with it. I am just sorry. It sounds like we study things to death here instead of doing something. It seems to me more that we have made perfect the enemy of good.

Mr. PONEMAN. Congressman, we have statutory obligations we need to fulfill, and we need to make sure that we are doing the right thing by the taxpayer. Now if it costs $150 million to produce separative work that will give you $151 million worth of benefit,

you have not done really what you need to do. So that is why we are trying to work with the committee, with the other House of Congress, with all the stakeholders to find out how to get the best value for the taxpayer. It is very practical, and we feel the fierce urgency of now. We are not trying to be anything other than very focused and concrete about this.

Mr. MCKINLEY. Thank you. I look forward to getting the information from you.

Mr. PONEMAN. Thank you, sir.

Mr. WHITFIELD. Well, I think that culminates the questions for this panel.

I would say this, Mr. Poneman, I know DOE has been working on this issue for a long, long time. The GAO even talks about a March, 2008, report, so forth. And I do take you at your word that you all are interested in solving this issue. And we have an opportunity to solve it. So, hopefully, we could have some additional discussions about this. Because I do think it is imperative that we—not only are we talking about disposing of this material and creating revenue for the government, we are talking about saving 1,200 jobs.

So, with that, this panel is dismissed; and we will call up the second panel. Thank you all very much—I mean, the third panel.

On the third panel, we have Mr. Jim Key, who is Vice President of the United Steelworkers Union Local 550; and we have Mr. Herman Potter, who is the President of the United Steelworkers Local 689.

So, Mr. Key and Mr. Potter, thank you very much for joining us this afternoon. We appreciate your coming into Washington for the purpose of testifying.

And at this time, Mr. Potter, I would recognize you for 5 minutes for the purpose of making an opening statement; and if you would be sure to touch the button so that your microphone is on. Thank you.

## STATEMENTS OF HERMAN R. POTTER, PRESIDENT, UNITED STEELWORKERS LOCAL 689; AND JIM H. KEY, VICE PRESIDENT, UNITED STEELWORKERS UNION LOCAL 550

### STATEMENT OF HERMAN R. POTTER

Mr. POTTER. Thank you.

I would like to thank the chairman and the committee members for the opportunity to come before you to testify on behalf of my constituency and also to support my colleagues from the Paducah, Kentucky, site. I also would like to acknowledge our Ohio delegation, which has always proven to be very helpful with issues related to the Piketon site in Southern Ohio and specifically those issues that deal with the enrichment site; and we encourage them to support this legislation and respond to this positively.

Mr. Chairman, I am going to kind of deviate a little bit from some of my details in my written testimony just because it is kind of redundant to what was mentioned before as far as some of the details and issues that went on the site. But I do want to identify some concerns that we have and some issues that we support.

My name is Herman Potter. I am the President of the United Steelworkers Local 689 at the Department of Energy Uranium Enrichment Site in Piketon, Ohio. I represent approximately 850 members that are involved in the environmental remediation, surveillance, maintenance, infrastructure, and also the depleted uranium conversion activities at the site.

Also, our local actually intends to eventually be the workforce at the American centrifuge project at the site, since our members were at the original—they actually operated the original uranium enrichment site that was closed down in the early 1980s. With multiple contractors and multiple jobs at the site, we actually have people working there that actually extend out in the whole region, including northeast Kentucky and also West Virginia. And even though I work at the Ohio site, I am actually a resident of Kentucky myself.

We know that the Members of Congress have debated the possibility of enacting this legislation to direct the re-enrichment of tails material since the uranium market had determined there is value when at one time it did not exist.

The value of the material due to the market change has provided us an opportunity for this re-enrichment to take place, eventually returning that monetary value back to the Department of Energy and allowing them to easily meet, or more easily meet, their obligations to the workforce and the communities where these DOE sites exist.

We believe that legislation is now warranted. The DOE has demonstrated inactivity as an agency in the implementation of this re-enrichment program due to the fear from foreign influence to uranium producers associations and other organizations. We respectfully request that you fully endorse the House Bill 2054 authored and introduced by Congressman Ed Whitfield for successful passage of the House by concurrent support by you and your colleagues in the U.S. Senate.

We are concerned about some issues. One is the timing of the Russian 123 agreement with the United States Enrichment Corporation. We are concerned about that this possibly would allow USEC to change their mission from being an uranium enricher to uranium broker, which would negatively impact the intended operation of the gaseous centrifuge plant in Piketon, Ohio.

The agreement would also eliminate any re-enrichment program, negatively impact the enrichment at the Paducah site, and eliminate the return of millions of dollars back to the DOE to fulfill their obligations.

Currently, we think more than $100 million per year can be realized with introduction and implementation of the pilot tails re-enrichment program. I would submit that the returns from this program be clearly identified and monitored to be used to fulfill the DOE's commitments and obligations. In so doing, things such as the complete funding of the retirement and benefits programs provided for those working at the Paducah and Piketon sites.

Currently, at the Piketon site itself, the DOE is deviating from the intent of the Congress by eliminating their obligations through manipulation and abuse of the Federal procurement process and reinterpretation of the law. The intent is clearly to fulfill a policy

of reduced post-retirement health care and pension obligations. The legislation would provide the funding that would eliminate that financial justification.

An additional concern needs to be addressed regarding the operation of the two DUF6 plants at Paducah and Piketon. The impact that this proposed legislation may have on the projected time of operation has been expressed. It is our belief that the number of re-enrichable DUF6 cylinders is limited in number and clearly not the full inventory of depleted cylinders. Considering the percentage of depleted uranium 238 to the desired uranium 235, the negative impact would be minimal and have little effect on the life span of the DUF6 plants. However, strict guidance and oversight over the DOE to ensure that the re-enriched material be returned to the site of origination would ensure any anxiety created regarding the reduction of plant life expectancy at the DUF6 plants.

We have concerns that the absence of establishing this as a sole-source contract is not in the proposed legislation. The fact that URENCO and AREVA are interested in the refeed heightens our concerns that the additional costs of transportation of the depleted tails cylinders from Paducah and Piketon to either of the re-enrichment sites would not considered.

Although we have historically had concerns about USEC's reliability and DOE's adequate oversight, we are confident that the strict guidelines and criteria would be put in place to ensure that these commitments and obligations are honored.

The Department of Energy has a unique opportunity to convert a stockpile of depleted uranium tails from its former enrichment plant operations into a commercially valuable product that can be sold to generate new revenue for the Federal Government. At the same time, this program would extend operations at the sole remaining U.S. gaseous diffusion plant, providing time for the U.S. Enrichment industry to transition to the advanced gas centrifuge technology.

The proposed program requires no additional appropriations, and it is completely self-funded. In fact, it would reduce the pressure to eliminate the commitments that this government expects the Department of Energy to follow.

The sale of re-enriched material proposed in this legislation would generate approximately $500 million. The total net value of the tails has been calculated to be as much as $4 billion.

And the congressman mentioned earlier about a concrete plan. Well, our site has a true grassroots, concrete plan for this funding.

We think these revenues should be used to provide full and complete funding for the retirement and health benefits at the Paducah and Piketon sites.

We think it should support the continued decommissioning and decontamination activities at the site, which would include reducing the contaminated barrel area footprint in preparation for reindustrialization of the site.

We think it should be used for reindustrialization of the Paducah and Portsmouth sites, which would include the supplemental funding of a plant—recycled metal plant at the Piketon site, which would reduce associated costs with waste removal and establish a specific source of materials to be used in construction and develop-

ment at future nuclear sites. And attached to the documentation we have a letter describing that initiative and detail.

Mr. WHITFIELD. Mr. Potter, if you would conclude your remarks, because you are already over about 3-and-a-half minutes.

Mr. POTTER. Oh, I'm sorry.

Also, we think we should support training and education for a rapidly depleting nuclear workforce and support advanced energy part initiatives.

In my conclusion, I just want to say that our constituency does not want this funding to be used for deficit reduction. We want to use these funds to fulfill the commitments made by the Department of Energy and the expected intent of our government to honor commitments and obligations to the aging workforce while concurrently creating an environment conducive to encourage site and workforce development. And I apologize——

[The prepared statement of Mr. Potter follows:]

UNITED STEELWORKERS

UNITY AND STRENGTH FOR WORKERS

LOCAL 689

**TESTIMONY OF**

**HERMAN R. POTTER, PRESIDENT**

**UNITED STEELWORKERS UNION**

**LOCAL 689**

**PIKETON, OHIO 45661**

**BEFORE THE**

**COMMITTEE ON ENERGY AND COMMERCE**

**SUBCOMMITTEE ON ENERGY POWER**

**ON**

**H.R. 2054**

**"ENERGY AND REVENUE ENRICHMENT ACT OF 2011"**

**JUNE 13TH. 2011**

**TESTIMONY OF HERMAN R. POTTER**
**President of United Steelworkers Local 689**
**Before the**
**House Committee on Energy and Commerce**
**Subcommittee on Energy**
**June 13th, 2011**

I would like to thank the chairman and the committee members for the opportunity to come before you to testify on behalf of my constituency and to support my colleagues from Paducah Kentucky. I also, would like to acknowledge our Ohio delegation, which has always proven to be helpful with the issues of Southern Ohio and specifically the Piketon enrichment site. We encourage them to respond positively to this proposed legislation.

Mr. Chairman and distinguished committee members, my name is Herman Potter. I am the President of United Steelworkers (USW) Union Local 689 at the Department of Energy (DOE) Uranium Enrichment Site located in Piketon Ohio. Our local is part of the United Steelworkers International Union (USWIU) which has approximately 850,000 active members. The USWIU is North America's largest industrial union. I represent approximately 850 members that are involved in the environmental remediation; surveillance and maintenance; infrastructure and depleted uranium conversion activities at the site. We also intend eventually to be the workforce at the American Centrifuge Project (ACP) now operated by USEC Inc., since our members were the original builders and operators of the initial Centrifuge Project at the site prior to the shut-down in the early 1980's. The multiple contractors at the site provide approximately 2000 jobs in a region that not only includes Southern Ohio, but also Northeastern Kentucky and West Virginia.

There are over 60,000 depleted uranium "tails" cylinders stored at the Paducah and the Piketon site. These cylinders were considered as a waste product of the enrichment process, with an environmental liability to the government and the local community. Congress enacted Public Laws 105-204 and 107-206, which required the Department of Energy (DOE) to build two (2) facilities, one in Paducah Kentucky, and one in Piketon Ohio, to de-fluorinate the depleted Uranium Hexafluoride (DUF6) material; thereby, substantially reducing the waste and liability of the disposal of said waste.

Members of congress have debated the possibility of enacting legislation to direct the re-enrichment of the "tails" material, since the uranium market had determined there is value that at one time did not exist. The value of the material, due to the rise in price of natural uranium, has provided an opportunity for re-enrichment to take place, eventually returning a monetary value back to the Department of Energy allowing it to easily meet its obligations to the workforce and the communities where these DOE sites exist.

We believe that legislation is now warranted. The DOE has demonstrated inactivity as an agency in the implementation of a re-enrichment program due in part to fear of foreign influences in the

Uranium Producers Association. I respectfully request that you fully endorse House Bill 2054, authored and introduced by Congressman Ed Whitfield for its successful passage in the House and concurrent support by your colleagues in the U.S. Senate.

We are concerned that the Department of Energy is compromised by allowing an entity with foreign interest influence to deter it from initiating programs and policies that would ultimately benefit our communities and national security. More importantly, the enactment of this legislation provides the DOE with the opportunity to fulfill commitments and obligations it has to the workforce and the surrounding communities.

We are concerned that the timing of the Russian 123 Agreement with USEC would eventually allow USEC to change their mission from being a uranium enricher to a uranium broker, which would negatively impact the intended operation of the Gaseous Centrifuge Plant located in Piketon Ohio. The agreement would also eliminate any re-enrichment program, negatively impact the enrichment at the Paducah site, and eliminate the return of millions of dollars back to DOE to fulfill its obligations.

The DOE currently has a self-imposed policy which only allows it to introduce enriched uranium into the market at 10% of the domestic uranium market volume. We ask that any introduced legislation permit the quota limit to be raised to allow up to 20% global market volume. The criterion would allow the DOE to use its operations, enrichment reserves and value to generate funding to fulfill its commitments and obligation to its stakeholders.

Currently, $100 million dollars per year can be realized with the introduction and implementation of the pilot tails re-enrichment program. I would submit that the returns from this program be clearly identified and monitored to be used to fulfill the DOE'S commitments and obligations. This should include the full and complete funding of the retirement and benefits programs provided for those working at the Paducah and Piketon sites. Currently at the Piketon site, the DOE is deviating from the intent of Congress by eliminating its obligations through manipulation and abuse of the federal procurement process and reinterpretation of the law. The intent clearly is to carry-out a policy of reduced post-retirement health care and pension obligation. The legislation would provide funding that would eliminate the financial justification for this.

Title XI of the Energy Policy Act of 1992 established the uranium enrichment Decontamination and Decommissioning (D&D) fund to support the cleanup of the federal enrichment facilities by the Department of Energy. Congress annually appropriates funds from the uranium enrichment D&D fund for the purpose of cleanup. The remaining fund does not appear to be sufficient to pay the estimated costs to complete the planned cleanup actions over the long term. The shortfall in the fund creates a situation that in order for the government and the DOE to meet their commitment, the cleanup would have to be financed entirely by the federal government. This proposed legislation provides an opportunity to make up some of the shortfall in the D&D fund. Specifically, the revenues should also provide full and complete funding for the D&D project at

the Piketon Ohio site with the intent to facilitate efforts to accelerate the reduction of the onsite waste footprint, which would encourage re-industrialization and the eventual handover of the land for future development to organizations such as the Southern Ohio Diversification Initiative (SODI). This commitment and strict oversight of the DOE would create sustained work in the community and ensure economic prosperity to the region.

An additional concern needs to be addressed regarding the operation of the two (2) uranium enrichment plants at Paducah and Piketon. The impact that this proposed legislation may have on the projected time of operation has been expressed. It is our belief that the number of re-enrichable DUF6 cylinders is limited in number and clearly not the full inventory of depleted uranium cylinders. However, strict guidance and oversight over the DOE is needed to ensure that the re-enriched material is returned to its site of origination.

We have concerns that establishing this as a sole source contract is not in the proposed legislation. The fact that URENCO and AREVA are interested in the re-feed heightens our concerns that the additional cost of transportation of the depleted tails cylinders from Paducah and Piketon to either of the re-enrichment sites would not be considered. Furthermore, the URENCO site is not yet operating at full capacity and AREVA has not yet begun construction on its project. Although we have historically had concerns about USEC's reliability and DOE's adequate oversight, we are confident that strict guidelines and criteria can be put in place to ensure the intent of these commitments and obligations are honored.

The Department of Energy has a unique opportunity to convert a stockpile of depleted uranium tails from its former enrichment plant operations into a commercially valuable product that can be sold to generate new revenue for the federal government. At the same time, this program would extend operations at the sole remaining U.S. Gaseous Diffusion Plant providing time for the U.S. enrichment industry to transition to advanced gas centrifuge technology. The proposed program requires no additional appropriations. It is completely self-funded. In fact, it would reduce pressure to eliminate the commitments that this government expects the Department of Energy to follow. The sale of re-enriched material, proposed in this legislation, would generate approximately 500 million dollars. The total net value of the tails has been calculated to be as much as $4 billion dollars.

Summary of USW Local 689 Concerns:

- Revenues should be used to provide full and complete funding of the retirement and health benefits at the Paducah and Piketon site.
- Revenues should fund and support the continued Decommissioning and Decontamination activities at the Portsmouth site, which would include reducing the contaminated burial area footprint in preparation for reindustrialization of the site.
- Revenue should support reindustrialization of the Paducah and Portsmouth sites, which would include supplemental funding of the plant to recycle metal at the Piketon site, which would reduce the associated cost of waste removal and establish a specific source

of materials to be used in the construction and development of future nuclear sites. (see attached letter)

- Revenues should support nuclear training and education for a rapidly depleting nuclear workforce. (see attached letter)
- Revenue should fund Advanced Energy Park Initiatives (see attached letter)
- The legislation should establish that the secondary tails be returned to the original site of origin (Paducah or Piketon) in order to ensure that there isn't any negative impact to the uranium enrichment plants at the respective sites.

Conclusion:

My constituency does not want these funds to be used for deficit reduction. The use of these funds should be for the commitments made by DOE and the expected intent of my government to honor these commitments and obligations to the aging workforce, while concurrently creating an environment conducive to encourage site and workforce redevelopment.

UNITED STEELWORKERS
USW
UNITY AND STRENGTH FOR WORKERS

Bobby Graff, President
Herman Potter, Vice President

LOCAL 689

May 21, 2009

Mr. Bill Murphie
U.S. Department of Energy
P.O. Box 700
Piketon, Ohio 45661

**RE: COMMUNITY SUPPORT FOR THE ADVANCED TECHNOLOGY, OPERATIONS, AND MANUFACTURING INDUSTRY CENTER (ATOMIC) FOR SCIENCE AND ENERGY EDUCATION DEVELOPMENT IN SOUTHERN OHIO**

Dear Mr. Murphie:

Thank you so much for providing the southern Ohio community the opportunity to participate in meaningful and informed discussions related to environmental remediation and decontamination and decommissioning (D&D) decision making. We are excited to be moving forward with the D&D project and developing a vision beyond the clean up for the southern Ohio workforce and community.

The purpose of this correspondence is to express our support for developing the Advanced Technology, Operations, and Manufacturing Industry Center (ATOMIC) for Science and Energy Education Development in southern Ohio. It is imperative that we work together to develop a highly trained workforce in sufficient numbers to support the Energy Park Initiative and to build the capacity of the local community to become informed participants in US DOE's environmental decision making.

The ATOMIC program is designed to provide universal, site-wide training for the existing workforce, ensuring safe, secure, and efficient operations and continuity throughout the US DOE PORTS Site to protect human health and the environment, *and* to prepare the next generation for careers in advanced energy and environmental technologies, guaranteeing the success of the Energy Park Initiative at the Portsmouth Site.

The ATOMIC training program and facility will provide a competitive edge to the southern Ohio workforce because, regardless of the discipline or area of interest, these stackable and transportable training modules can be combined with other training, vocational education, or college degree programs, or they can be used as a stand-alone credential. The Ohio Skills Bank has been working hard to develop the Advanced Energy Curriculum, and the proposed ATOMIC brings it all together by establishing a formal partnership with the various educational institutions, the Ohio Skills Bank, United Steel Workers, and the US DOE PORTS Site contractors. Our region's ability to provide a well trained and highly skilled workforce is a key ingredient to implementing a successful reindustrialization program focused on new and emerging technologies in advanced energy, environmental technologies, and alternative energy research and development.

Support for this initiative is demonstrated by the signatures presented with this letter.

Sincerely,

Bobby Graff
President, USW Local 689

Jennifer Chandler
Executive Director, SODI

UNITED STEELWORKERS
USW
UNITY AND STRENGTH FOR WORKERS
LOCAL 689

*Bobby Graff, President*
*Herman Potter, Vice President*

May 21, 2009

Mr. Bill Murphie
U.S. Department of Energy
P.O. Box 700
Piketon, Ohio 45661

**RE: COMMUNITY SUPPORT FOR REUSE AND RECYCLING OF MATERIALS GENERATED BY FACILITY DECONTAMINATION AND DECOMMISSIONING AND FUTURE REMEDIATION ACTIONS AT THE PORTSMOUTH SITE**

Dear Mr. Murphie:

Thank you so much for providing the southern Ohio community the opportunity to participate in meaningful and informed discussions related to the disposition of materials generated by facility decontamination and decommissioning and future remediation actions at the Portsmouth Site. We are excited to be moving forward with the D&D Project and developing a vision beyond the clean-up for the southern Ohio workforce and community.

As a matter of good stewardship, we firmly believe that the best way to disposition the materials generated by facility decontamination and decommissioning and future remediation actions at the Portsmouth Site is to establish an on-site recycling program for metals and other materials suitable for reuse. The southern Ohio community and the Ohio Delegation responded to the Draft Request for Proposals (RFP) for the Decontamination & Decommissioning of the Portsmouth Plant issued by the U.S. DOE on January 15, 2009, in total opposition of the construction of an onsite disposal cell. The community's position is that the construction of an onsite disposal cell can have negative effects on redevelopment, and therefore, an onsite disposal cell is not in the best interest of our community. However, the cost to ship wastes off site is significantly higher than utilizing an on-site disposal cell and most of the project funding would go to the off-site disposal facility. Our collective objective is to keep as much of the project funding as possible in our community, to employ as many local people as possible to do the work, and to maximize the opportunity to redevelop the site. Establishing an onsite recycling program for metals and other materials keeps the project funding in our community by reducing the number of units shipped off site and does not result in an on-site disposal cell.

We recommend that 100% of the metals removed by the D&D Project be recycled utilizing a metals smelting/recycling facility and a dedicated steel mill constructed and operated on the U.S. DOE PORTS site. The recycled products that fall under the restrictions of the moratorium will be used solely for the U.S. Department of Energy Programs and the Nuclear Energy Industry, such as Defense Programs, Environmental Management, Non-Proliferation and National Security, Nuclear Energy, Science and Technology, Office of Science and Office of Civilian Radioactive Waste Management, as well as manufacturing parts and components dedicated for use in nuclear reactors, waste storage, fuel fabrication and storage, and uranium enrichment. Materials that can be free-released can be sold on the open market.

We also recommend establishing a research and development project/program physically located on the U.S. DOE PORTS site dedicated to developing creative and innovative methods using the best available technology to recycling and reuse all non-metal material types generated by the facility decontamination and decommissioning and future remediation actions at the Portsmouth Site.

Support for this initiative is demonstrated by the signatures presented with this letter.

Sincerely,

Bobby Graff
President, USW Local 689

Jennifer Chandler
Executive Director, SODI

UNITED STEELWORKERS
USW
UNITY AND STRENGTH FOR WORKERS
LOCAL 689

Bobby Graff, President
Herman Potter, Vice President

May 21, 2009

Mr. Bill Murphie
U.S. Department of Energy
P.O. Box 700
Piketon, Ohio 45661

**RE: COMMUNITY SUPPORT FOR THE ENERGY PARK INITIATIVE AT THE PORTSMOUTH SITE**

Dear Mr. Murphie:

Thank you so much for providing the southern Ohio community the opportunity to participate in meaningful and informed discussions related to environmental remediation and decontamination and decommissioning (D&D) activities. We are excited to be moving forward with the D&D project and developing a vision beyond the clean up for the southern Ohio workforce and community.

The purpose of this correspondence is to express the community's support for implementing the Office of Environmental Management's Energy Park Initiative at the Portsmouth Site. The D&D project is the ideal mechanism through which U.S. DOE can establish an Energy Park at the Portsmouth Site. It is our expectation that the D&D project objectives will accomplish this end use by creating reusable properties, preserving all site infrastructure, and preparing the Portsmouth Site for advanced energy and environmental technology projects, including but not limited to materials reuse and recycling, waste minimization and pollution prevention technologies, wind, solar, biomass, nuclear power, desalinization, geothermal, liquefied natural gas transfer stations, hydrogen generation, advanced energy research and development; and specialty component manufacturing capabilities for the advanced energy industry.

Support for this initiative is demonstrated by the signatures presented with this letter.

Sincerely,

Bobby Graff
President, USW Local 689

Jennifer Chandler
Executive Director, SODI

Mr. WHITFIELD. It is OK. Thank you.

Mr. Key, you are recognized for 5 minutes for your opening statement.

**STATEMENT OF JIM H. KEY**

Mr. KEY. Thank you, sir.

Before I begin, please allow me to take an opportunity to thank you, Chairman, Ranking Member Rush, and commend members for conducting this hearing today and allowing me to come and testify on this unique opportunity to clean up waste, preserve jobs, and actually make money for the government.

Mr. Chairman and distinguished committee members, I am Jim Key, the Vice President of the United Steelworkers Local 550 at the Paducah Gaseous Diffusion Plant in Paducah, Kentucky. There are approximately 850,000 active members of the United Steelworkers International Union, and we are North America's largest industrial union. I represent approximately 1,000 members who are involved in uranium enrichment, environmental remediation, infrastructure, and depleted uranium conversion activities at the Paducah site, which houses our Nation's last U.S. Government-owned, operating uranium facility.

I do not come before you today solely as the representative of the union hourly workers but also as a representative for the non-union salaried workers at the facility, for the residents of the community of which I have been a part for the past 56 years, and the economic stability of the region as a whole. Twelve hundred workers are employed at the enrichment facility, which is scheduled to shut down after advanced technology comes on board.

The wages of the workers at the facility turn over six to seven times within our regional community, providing over $50 million annually for the economy, which has a direct effect on the viability of local businesses. Services and goods purchased by our combined workforce allow businesses to not only operate but also to thrive and provide the tax base of the community as a whole.

Our region has recently been devastated by the shutdown of major industrial employers in the past 5 years. It started with the loss of the General Tire plant and has accelerated with the most recent announcement of the closing of the Goodyear Tire plant in Union City, Tennessee, very close to western Kentucky, where an additional 1,600 family and community supportive jobs will disappear at the end of 2011. I am sure in an era of high unemployment you can fully realize the impact of an additional loss of 1,200 highly skilled employees at the gaseous diffusion plant and the devastating rippling effect it would have on our regional area.

In order to keep these 1,200 jobs in Paducah, many of us have been suggesting that the Department of Energy start a program to re-enrich the 62,000 depleted uranium tails cylinders stored at Paducah and Portsmouth. Until a few years ago, these cylinders were considered a waste byproduct of the enrichment process and an environmental liability to our government and our community.

As a matter of history, Public Laws 105–204 and 107–206 were championed by Senator Mitch McConnell and enacted by Congress to build facilities to convert these tails to a more stable substance,

which proves these tails were then considered a liability to the government.

DOE has a unique opportunity to re-enrich tails left over from the former enrichment plant operations into commercially valuable natural uranium that can be sold to generate new revenue for the Federal Government. At the same time, the program will be a significant factor in extending operations at the sole remaining plant in Paducah.

The proposed program requires no appropriations. It is self-funded in that a portion of the natural uranium feed generated will be sold to pay for the enrichment. This program it remarkable in that it actually raises revenue for the Federal Government through the sale of the enriched uranium.

This program would utilize all the resources of Paducah plant while it is still operational. Once the plant shuts down, re-enrichment tails become significantly more expensive for the government because of transportation costs and the benefit of the program is greatly reduced.

This issue is critically important to the members of the United Steelworkers Local 550 in that it provides the best opportunity to extend our production jobs at the Paducah plant at a time when manufacturing employment is at record lows and the regional economy is still sputtering to recover from a nationwide recession, as shown in the latest jobs report.

There is also good reason to believe that the loss of the second largest industrial customer will lead the Tennessee Valley Authority to act on its plan to begin closing its electrical power plant near the plant where I work, causing further job losses of good jobs in a region that desperately needs them.

After hearing about such a productive program, I am sure you are asking yourself, why are we not implementing this program? To answer that, we actually think DOE could do this without legislation, but because of DOE inaction on this issue over the past several years I believe legislation is now warranted.

While DOE currently has a self-imposed policy which only allows it to introduce enriched uranium into the market at 10 percent of the domestic uranium demand, we believe that this quota is not conducive to allow domestic uranium enrichment processes and programs to reach their full potential and value. At current market value, a return of between 235 and 500 million dollars per year can be realized with the implementation of the pilot tails re-enrichment program we were discussing today.

Finally, there comes the issue of right and wrong. When the United States needed a reliable supply of enriched uranium for its weapons programs, it turned to Paducah and other nuclear sites around the country for help. They found strong communities and good people who were proud to assume that responsibility in spite of the hazards that came with it.

For nearly 60 years, this community has been home to millions of tons of DOE's waste tails; and now that the tails are recognized to have value, Paducah, the region, and the plant employees should be the ones to benefit. To even consider shipping these tails away from Paducah to another facility is simply wrong.

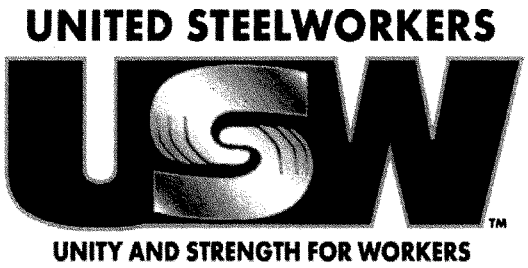
The highly trained sons and daughters of those original enrichment facility employees continue working hard to provide a safe operating facility at outstanding production levels, providing a reliable, vital service at the Paducah plant; and they deserve a chance to protect their jobs and the regional communities in which they live by re-enriching these tails.

This is not a government handout, and it will not cost the government or taxpayers one cent. To the contrary, the government will make money. How many bills will you vote on this session that can make that claim? This is a case of the government making a sound policy and economic decision to utilize an important national resource for the benefit of the entire country.

In closing, I ask you to fully endorse and support H.R. 2054 offered and introduced by Chairman Whitfield for a successful passage in the House of Representatives and concurrent support by you with your counterparts and colleagues in the Senate.

This concludes my opening statement. I will be happy to answer any questions the committee members might have.

[The prepared statement of Mr. Key follows:]




Opening Statement and Testimony of

**Jim H. Key, Vice President**
**Local 550**
**Paducah, Kentucky 42001**

**United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (USW)**

Before the

**House Committee on Energy and Commerce**
**Subcommittee on Energy and Power**

On

# Energy and Revenue Enrichment Act of 2011

**June 13, 2011**

Before I begin, please allow me to take this opportunity to thank the Chairman, Ranking Member Rush, and the committee members for conducting this hearing, and allowing me to come before you to testify today on this unique opportunity to clean up waste, preserve jobs, and actually make money for the government.

Mr. Chairman and distinguished committee members, my name is Jim Key, and I am the Vice President of United Steelworkers (USW), Local Union 550, at the Paducah Gaseous Diffusion Plant (PGDP) in Paducah, Kentucky. There are approximately 850,000 active members of the USW International Union, and we are North America's largest industrial union. I represent approximately 1,000 members who are involved in uranium enrichment; environmental remediation; infrastructure; and depleted uranium conversion activities at the site, which houses our nation's last U.S. government-owned, operating uranium enrichment facility.

I do not come before you today solely as the representative of union hourly workers, but also as a representative for the non-union salaried workers at the facility, for the residents of the community of which I have been a part for the past 56 years, and the economic stability of the region as a whole. A total of 1,250 workers are employed at the enrichment facility, which is scheduled to shut down after new technology is made available. The wages of the workers at the facility turn over six to seven times within our regional community, which has a supply side affect directly on the viability of local businesses. Services and goods purchased by our combined workforce allow businesses to not only operate, but to also thrive, and provide the tax base of the community as a whole. Our region has been devastated by the shut-downs of major

industrial employers in just the last five years. It started with the loss of the General Tire plant and has accelerated with the most recent announcement of the closing of the Goodyear Tire Plant in Union City, Tenn., very close to Western Kentucky, where 1,600 family and community-supportive jobs will disappear at the end of 2011. I'm sure in an era of high unemployment, you can fully realize the impact of an additional loss of 1,250 highly-skilled employees at the gaseous diffusion plant and the devastating rippling economic effects it would have on our regional area.

In order to keep these 1,250 jobs in Paducah many of us have been suggesting that the Department of Energy start a program to re-enrich the 40,000 depleted uranium "tails" cylinders stored at the Paducah site. There are additionally over 20,000 cylinders stored at the now closed enrichment facility at Portsmouth, Ohio. Until a few years ago, these cylinders were considered as waste byproduct of the enrichment process, and an environmental liability to the government and local community. As a matter of history, Public Laws 105-204, and 107-206 were championed by Senator Mitch McConnell and enacted by Congress to build facilities to convert these tails to a more stable substance, which proves that these tails were then considered a liability to the government.

The Department of Energy has a unique opportunity to re-enrich tails left over from its former enrichment plant operations into commercially valuable natural uranium that could be sold to generate new revenue for the federal government. At the same time, the program would be a significant factor in extending operations at the sole remaining U.S. government owned gaseous diffusion plant pending transition of the U.S. enrichment industry to new technology.

The proposed program requires no appropriations. It is self-funded in that a portion of the natural uranium feed generated will be sold to pay for the enrichment.

This program is remarkable in that it actually **raises** revenue for the Federal Government through the sale of the re-enriched uranium. It is NOT a hand-out or a giveaway. This program would utilize all the resources of the Paducah plant while it is still operational. Once the plant shuts down, re-enriching tails becomes significantly more expensive for the government because of transportation costs and the benefit of the program is greatly reduced.

This issue is critically important to the members of United Steelworkers Local 550 in that it provides the best opportunity to extend our production jobs at the Paducah plant, at a time when manufacturing employment is at record lows and the regional economy is still sputtering to recover from the nationwide recession, as shown in the latest jobs report.

And, there is good reason to believe that the loss of its second largest industrial customer will lead the Tennessee Valley Authority (TVA) to act on its plan to begin closing its electrical power plant near the plant where I work; causing further job loss of good jobs in a region that desperately needs them.

After hearing about such a productive program, I am sure you are asking yourself – why are we not implementing such a program?

To answer that question, we actually think that DOE could do this without legislation, but because of DOE inaction on this issue over the past several years, I believe legislation is now warranted. To that end, I ask that you fully endorse H.R. 2054, authored and introduced by Congressman Whitfield for its successful passage in the House of Representatives and concurrent support by you with your counterparts and colleagues in the Senate.

While DOE currently has a self-imposed policy, which only allows it to introduce enriched uranium into the market at 10% of the domestic uranium demand, we believe that this quota is not conducive to allow domestic uranium enrichment processes and programs to reach their full potential and value. At current market value, a return of between $230 million and $500 million dollars per year can be realized with the implementation of the pilot tails re-enrichment program we are discussing today. I would also submit to you that the returns should be deposited into the uranium decontamination and decommissioning (D&D) fund, which H.R. 2054 seeks to do, and provide any additional revenue it creates to the re-industrialization of the sites at Paducah, Kentucky and Portsmouth, Ohio

Finally, there comes the issue of right and wrong...when the United States needed a reliable supply of enriched uranium for its weapons program, it turned to Paducah and other nuclear sites around the country for help. They found strong communities and good people who were proud to assume that responsibility in spite of the hazards that came with it.

For nearly 60 years, this community has been home to millions of tons of DOE's waste tails and now that the tails are recognized to have value, Paducah, the region and the plant employees should be the ones to benefit. To even consider shipping the tails away from Paducah to another facility is simply wrong. The highly trained sons and daughters of those original enrichment employees continue working hard to provide a safe operating facility, at outstanding production levels, providing a reliable vital service at the Paducah plant, and they deserve the chance to protect their jobs and the regional communities in which they live, by re-enriching these tails.

I urge you to support H.R. 2054. I would be happy to answer any questions that Committee members may have. Thank you

**Background**

This plant has a long history of providing a great benefit to the country. From its days as a key component of America's national security to its current role in helping dismantle 20,000 Russian nuclear weapons and providing fuel to operate nuclear power plants, the Paducah Gaseous Diffusion Plant has long been a treasured national asset.

The Paducah plant is in the twilight of its great career. It is very energy intensive to operate and USEC, the company that operates it, is transitioning to a new plant technology. The plant's current power contract ends in the middle of 2012, but I understand that the company is negotiating with TVA to extend it.

It is in this context that we are presented with such a unique opportunity.

Until 1998, the U.S Government was responsible for enriching uranium. One byproduct of the enrichment process is depleted uranium "tails" which have limited use and are stored for disposal. From its decades of enrichment operations, the Department of Energy has a massive inventory of depleted uranium "tails", some 61,550 cylinders at Paducah and the former gaseous diffusion plant in Piketon, Ohio.

Left as they are, the Department at some point will be obligated to safely dispose of these tails and in fact DOE has constructed facilities at both plants to convert and dispose of these tails, a process that will take up to 25 years.

However, some of those could be re-enriched into commercially valuable natural uranium, a commodity that could generate revenue for the government. If DOE paid an enricher to re-enrich the tails, it could sell the resulting natural uranium on the open market. Some of the natural uranium produced could be sold to pay for the re-enrichment of the tails, with others parts sold to pay for other activities such as clean-up of the Portsmouth and Paducah plants, or could be held in inventory by DOE for future uses. It is my understanding that Representative Whitfield's bill could generate $500 million in federal revenue, and the total net value of the tails has been calculated to be as much as $4 billion.

**Whitfield Legislation**

The USW supports the intent of the Whitfield legislation to establish a pilot project at Paducah to re-enrich these tails. We think it makes sense economically and environmentally and we believe that extending work at Paducah is sound policy.

It goes without saying that we support keeping 1,200 people working. These are good jobs that pay well and if they are gone, they will not be easily replaced. What will the cost to the government be of these workers losing their jobs?

Many of these people have dedicated their entire lives to the Paducah plant. They exemplify a culture of safety. And despite operating a plant more than a half-century old, they continue to perform at the highest levels in the plant's history. Throwing away these jobs in today's economic environment simply makes no sense.

Economically this project makes sense. First, it will convert what is currently a liability, the depleted tails, into an asset that will generate revenue for the government. The Department of Energy is obligated to clean-up its sites, such as the Paducah site and the Portsmouth site in Ohio, both which hold depleted tails. If these tails are not put to good use, they will represent an added cost of clean-up to DOE.

It also makes sense to deploy this project while Paducah is operational. Some have argued that newer centrifuge enrichment plants are better placed to re-enrich these tails. This is wrong for two reasons. One, the new plants are generally built to meet contracted demand. These facilities are already under long-term contracts for their services and will not have the excess capacity needed to undertake this project. Paducah does, and will.

Also, the centrifuge plant in Idaho and USEC's new plant in Ohio are still years away. The New Mexico plant experienced problems upon start-up and its initial operation will also be delayed.

Even if the new centrifuge plants had capacity and were online, DOE would be paying the market rate for enrichment services whether those services were performed at Paducah, or at the new plant. If DOE were to wait until new plants were on-line, there would be no guarantee that it would be any cheaper in the future. If the government decided to re-start Paducah later solely to re-enrich tails, it would do so at great cost, challenging the economics of the project.

Finally, some have suggested that DOE could even use existing enrichment capacity in other countries. I summarily reject the idea that important operations of the U.S. government should be outsourced to foreign entities on the backs of American workers.

**The Bigger Picture**

As I have detailed above, the USW supports the principles of this legislation and believes the project stands on its own merits. However, it is important to understand how it fits into a larger context here. This project provides the best opportunity to extend jobs and the Paducah plant at a time when manufacturing employment is at record lows and the regional economy is still attempting to recover from the nationwide recession.

With the recent closure of the General Tire plant in nearby Mayfield, Kentucky and Goodyear Tire & Rubber Company's announcement that it will close its production facility in West Tennessee at the end of the year, western Kentucky workers are already struggling to support their families.

Be assured that shutting down enrichment operations at the Paducah plant will have ramifications far beyond the 1,200 people the enrichment plant employs. The plant and its workers are cornerstones of the local economy, with their wages turning over 6 to 7 times within the regional businesses, stores, and service sector industry, providing $50 million dollars annually for the economy. The plant frequently uses members of the local construction trades to work on special projects as do our major electricity providers, TVA's Shawnee Steam Plant, and the Electric Energy Incorporated facility in Joppa, Illinois.

If the re-enrichment project does not happen and the Paducah plant shuts down, there is good reason to believe that the loss of its second largest industrial customer will lead TVA to act on its plan to begin closing its Paducah's Shawnee Steam Plant with additional loss of hundreds of good jobs.

Finally, there comes the issue of right and wrong....when the United States needed a reliable supply of enriched uranium for its weapons program, it turned to Paducah and other nuclear sites around the country for help. They found strong communities and good people who were proud to assume that responsibility in spite of the hazards that came with it. This community supported the country and we don't think it is out of line to expect the country to support this community.

For nearly 60 years, this community has been home to millions of tons of DOE's waste tails and now that the tails are recognized to have value, Paducah and the plant employees should be the ones to benefit. To even consider shipping tails away from Paducah to a foreign-owned, non-union enrichment company is simply wrong. The highly trained sons and daughters of those original enrichment employees continue working hard, and safely to provide a vital service at the Paducah plant and they deserve the chance to protect their jobs by re-enriching these tails.

**Conclusion**

This bill is based on the premise that the government should utilize valuable resources at its disposal to generate great American economic and environmental benefits. The USW believes that is a sound policy to pursue.

If you agree with that premise, then the question becomes where to en-rich those depleted tails. Clearly, I believe Paducah is the answer to that question. The plant is ready to perform the task now, it possesses the excess capacity to do the project, DOE will pay the same market rates it would pay elsewhere and doing so will save some 1,200 plus jobs at a time when we can ill afford to just let them go. Moreover, I believe this community over the past 60 years has earned the right to pursue this project.

This bill is not an ear-mark, it is not a government hand-out, and it will not cost the government or the taxpayers one cent. To the contrary, the government would make money.

How many bills will you vote on this session that can make that claim? This is a case of the government making a sound policy and economic decision to utilize an important national resource for the benefit of the entire country.

On behalf of the United Steelworkers Local 550, and its members who perform the work at the Paducah Gaseous Diffusion Plant, I thank Chairman Whitfield for his leadership on this issue and I urge Congress to work quickly to pass this important legislation. Thank you.

Mr. WHITFIELD. Thank you, Mr. Key and Mr. Potter, for your testimony.

So, Mr. Key, you support this legislation, correct?

Mr. KEY. That is correct.

Mr. WHITFIELD. And, Mr. Potter, do you support this legislation?

Mr. POTTER. Yes, we do.

Mr. WHITFIELD. Now, to be fair, critics of this legislation say the U.S. Government, whenever it enters into a contract, they have competitive bidding, which makes all the sense in the world. Because, normally, you have competitive bidding and you get a lower price. Would either one of you—I would ask one of you, or both of you, to explain from your perspective what it is about this legislation, while it does not have competitive bidding, what are the practical impacts, what are the practical problems if you had competitive bidding in this legislation?

Mr. KEY. The problem I have, Chairman, with any competitive bidding process is you have other enrichers that have foreign influence. If they were successful in winning that bid, there is nothing that would prevent them from loading these cylinders up and transporting them to Russia, to France, or to a European consortium and doing the enrichment process there, virtually leaving the 1,200 plus workers at Paducah without a job.

Mr. WHITFIELD. And, in the United States—obviously, this can be done at Paducah. I assume it can be done in New Mexico, even though I still understand they are undergoing trials out there with their process. And the Idaho facility is not going to be built for years and years to come. So the reality is there are only two places in the U.S. that it is conceivable that it can be done; is that correct?

Mr. POTTER. Yes. Yes, that is our understanding.

Mr. WHITFIELD. Now, we hear a lot about the contamination issue, that this material, transuranic, and other things, that it is contaminated and that the Paducah plant is already contaminated. Well, the New Mexico plant is not contaminated. So if you own the plant in New Mexico would you be excited about bidding to enrich these depleted tails?

Mr. KEY. If I was the owner of the New Mexico facility, I would not want this material to be introduced into my system, thereby transferring that contamination.

I also think the New Mexico facility was built—their capacity that they have built that plant at is based upon the contracts that they already have out in the previous years. I don't think they have the capacity to enrich these fields.

As far as the problem as has been spoken today by others of supposedly a sole-source contract and not going to competitive bid, as far as the profit margin that the enrichment may make, I think since enrichment would likely be at published commercial rates, the profit margin, as I understand it, are very minimal. The true value to the D&D Fund would come from the uranium generated in excess of what the enrichment costs the DOE will obtain when it is sold to the highest——

Mr. WHITFIELD. So you are saying that USEC would be paid a fee for re-enriching the material; is that correct.

Mr. KEY. Yes. I believe their charge as well as any published rate that is currently there.

Mr. WHITFIELD. And there is a commercial published rate on that, correct?

Mr. KEY. Yes, sir.

Mr. WHITFIELD. And the Federal Government would sell the enriched uranium and from those profits money would go to the decontamination fund, correct?

Mr. KEY. That is correct, sir.

Mr. WHITFIELD. Mr. Potter, did you want to have any comment on that?

Mr. POTTER. I think if we actually go outside, go to the bidding process, I am not very confident that that money would be funneled back into cleaning up the Portsmouth/Paducah site. That is where these cylinders are, and that is where they were generated. And I think there is some obligation to the workforce in the area and the community in the area to maintain the work and clean up those areas and reduce the footprints, use that money to reduce the contaminated barrel site footprints so they can reindustrialize.

Mr. WHITFIELD. And in the U.S. there is only two places that it is conceivable that it could be done, correct?

Mr. POTTER. Yes.

Mr. WHITFIELD. Now, just briefly, on the DUF6, your concern about the DUF6 facility is that if you utilized too many of these canisters for enrichment that you would jeopardize the DUF6 plan?

Mr. POTTER. Now let me clarify the point I was trying to make. The thing of it is that one of the criticisms that we have heard from a lot of people is that if you do this that it would reduce the life expectancy of the DUF6 plans.

Mr. WHITFIELD. OK.

Mr. POTTER. Because we have worked in the areas and we understand the science associated with the enrichment process, we believe that there is still—we are talking about a minimal number of cylinders that would be generated to basically make the enrichment—the newly enriched material. You still have quite a number—in fact, mostly DUF6 material—that still would have to go through the DUF6 process.

We think it would be fine. We don't think it would have any negative impact at all. We just think that if there would be some criteria established it may alleviate some angst that some of the community people have and some of the naysayers would have.

Mr. WHITFIELD. My time has expired.

Mr. Key, would you want to make a comment?

Mr. KEY. To you put it in perspective, if you will, Mr. Chairman, for every five cylinders of depleted tails that you would feed into the re-enrichment pilot program, you would still have three cylinders of depleted tails coming out on the depleted end stream, which would then be taken into the DUF6——

Mr. WHITFIELD. OK.

Mr. KEY. I have also asked DOE and insinuated to them that those cylinders sitting in the yard have various levels of assay amounts. We need to take those that have the least amount of assay material to start feeding in DUF6 to save the rest for a re-enrichment program.

Mr. WHITFIELD. Thank you.

Mr. Rush, you are recognized for 5 minutes.

Mr. RUSH. Mr. Potter, do you trust USEC?

Mr. POTTER. My sense, sir, no. We feel like they have been unreliable in the past. That is why we are advocating putting some very strict guidelines on USEC to make sure that they follow the rules correctly.

Mr. RUSH. What about you, Mr. Key?Do you trust USEC?

Mr. KEY. I trust USEC today more than I did in their formative years under the Presidential appointee that they had operating as a CEO at that time, yes, sir.

Mr. RUSH. Mr. Key, do you think that USEC will live up to its obligations if this legislation will go forward without any restrictions, any competitive processing occurring? Do you think that USEC will live up to its word?

Mr. KEY. Yes, sir, I do.

Mr. RUSH. What about you, Mr. Potter?

Mr. POTTER. I think so.

Mr. RUSH. You indicated that you thought that USEC would change its mission if this legislation was enacted. How fearful are you that USEC would change its mission to becoming a broker if this legislation was enacted?

Mr. POTTER. I am pretty confident that we can establish direction and guidelines to make sure that they could not do that type of activity.

Mr. RUSH. How would you do that? How would you do that?

Mr. POTTER. I would hope that our Congress, somebody much better—more than I am—could actually establish those criteria.

Mr. RUSH. So you think that this legislation is not protective in a more profound and absolute way of the 1,200 workers, that the 1,200 workers, if we pass this legislation as written, that you would be left at the mercy of USEC without any way of blending or amending or in any way changing their relationship with the 1,200 workers and your union?

Mr. POTTER. I think that there is some guidelines that could be established to prevent them——

Mr. RUSH. Who will establish the guidelines?

Mr. POTTER. Congress. I would think Congress could do this.

Mr. RUSH. Are you suggesting that this legislation should see through the possibility that USEC would take this legislation if it became law and just run away and do what they wanted to do, become whatever they wanted to become, and leave 1,200 workers that we are all concerned about, leave them standing still and suffering as a result without pensions?

Mr. KEY. No, sir. Ranking Member Rush, I do not expect USEC to take this legislation in the form that it is written and run away with the proceeds and not provide the obligation that this legislation directs to keep the Paducah plant and 1,200 employees employed. I do not think that they would do that.

Mr. RUSH. Do you agree with that, Mr. Potter?

Mr. POTTER. Yes. That was some of the concerns that has been brought to us, and we are confident that that would not happen.

Mr. RUSH. If there are only two domestic companies that have the capacity and the capability to bid on the contract and USEC

is the best company to complete this bid, wouldn't it make more sense to include competitive bidding language so that everything is fair and transparent and that your union would be in a better position to negotiate with USEC around the issues that you hold near and dear?

Mr. KEY. Well——

Mr. RUSH. Such as——

Mr. KEY. In response, Ranking Member Rush, last year we completed a contract negotiation with USEC for the next 6 years on a contractual obligation between the union and the company. Again, I expressed my concerns with a competitive bid and without any guidelines that would prevent those with foreign interests to be able to bid and possibly successfully win that bid and then transport those cylinders out of our Nation to re-enrich, thereby taking away the money that this program can create for the Federal Government while also keeping workers employed.

Mr. RUSH. Well, don't you think that it is within the power of the Members of Congress to ensure that your experience is not realized, that if there is a foreign company that bid or even successfully bid that their commission restrictions placed on that company in terms of—that would help your workers maintain—we are all for protecting American jobs.

Mr. KEY. Right.

Mr. RUSH. I want to protect American jobs. I want your 1,200 workers to keep their jobs, keep their pension, and for us to repay the extraordinary contribution that they made, to pay them for that. All right. I am for that.

Mr. KEY. Thank you.

Mr. RUSH. And I want to protect that. But I don't want to just give one company the sole authority to deal with this significant problem that we are faced with as a Nation and then for that company to renege on the American workers and on the community right now. And I think the best way to deal with that is to make sure there are some provisions in this law such as competitive bidding, all right, that will help your workers and help your community and to keep resolution of this issue in the hands of the American workers and not foreign workers. That is my concern. And I think we can get that through American—through competitive bidding, a competitive bidding process.

Right now, without that provision, we are just giving USEC the authority, mandating that the Department of Energy contract with USEC, and we are hoping and praying that USEC continues to be or turns out to be good guys and that they will keep their word. I don't think we should go into this with that kind of frame of mind. That is not good negotiating, as far as I am concerned. And I admire labor for their ability to negotiate strongly and to protect the American worker.

I yield back.

Mr. WHITFIELD. Did you all want to make a comment?

Mr. KEY. No. I agree with a lot of what the ranking member said. Some of the funds in excess of what this program can bring, a payment to the D&D fund, any excess value can go to the reindustrialization of both Paducah enforcement sites.

I don't need to sit here and have a discussion concerning the loss of manufacturing in this country in the last 10 to 12 years, and we as a Nation cannot continue to rely on service sector jobs to pay off our national deficit and reduce our debt and become a rich Nation again. We must invest—reinvest in the reindustrialization of our manufacturing sector. This is a clear example, this pilot program, of doing that.

Mr. WHITFIELD. Mr. McKinley, you are recognized for 5 minutes.

Mr. MCKINLEY. Thank you, Mr. Chairman.

Can either of you give us an example of the exposure that the men in the community have by having these canisters expose the elements like that? What are the health hazards that we are facing?

Mr. KEY. —that occurs on these canisters is put in place to check the wall thickness of the cylinders themselves because of the elements they are exposed to. And we have in the past had some of these walls to break through and create an HF cloud in reaction to the moisture of the material and try to encapsulate that and capture it. That is why we S&M—surveillance and maintenance—of those, test the wall thickness. But we have had those occasions where we have had to repair the cylinders on site to reduce any exposure, not only to the workers but also out to the community.

Mr. MCKINLEY. You both heard the testimony from the DOE. We have talked about and I really admire the fact that you are so passionate to protect those 1,200 jobs in all facilities. But we have a plan before us to protect the 1,200 jobs, we have a plan that is going to raise money for however it is to be spent, and we have a way to clean up an environmental problem. They want to continue to study it. Am I missing something? What did you hear that would put you at odds with the DOE?

Mr. POTTER. I kind of get the impression that they do study quite a bit. They study a lot. We need to start making decisions to clean up these sites. There is some opportunities here that we could actually do things in a reasonable, practical way as far as reducing the waste at the site.

At the Portsmouth site, we can't move on with reindustrialization until we can get rid of some of these low-waste material—low-RAD-waste material areas; and that is only going to help out. So that is why we had kind of a grassroots plan to go in there and maybe dig up some of these old sites, recycle some of the metal. That is a practical way to look at things. Even if you don't do anything with the metal, you are actually preparing it for future use and you are saving on the waste, that you have to ship it off and bury it somewhere else.

Mr. MCKINLEY. I am trying to understand why do you think the DOE wants to continue to study it and not to protect the 1,200 jobs and not to raise the money and not to clean up the site? What do you think their problem is?

Mr. POTTER. Personally, I think it is fear to make the decision, fear of making the wrong decision.

Mr. MCKINLEY. Do you agree?

Mr. KEY. To answer you, Congressman, I really don't know what their plan is. It has been related here this morning, or this after-

noon, we had this same hearing in 2008. They had a plan to forward, and here we are in 2011 and nothing has been done.

There is a couple comments in the Deputy Secretary's testimony that I will agree with, to support the maintenance of a strong domestic nuclear industry while also supporting the skilled jobs for American workers. I will agree with his testimony on that. That is my intent and my desire out of the legislation that the chairman has introduced.

Mr. MCKINLEY. Thank you. I yield back the balance of my time.

Mr. WHITFIELD. Thank you, Mr. McKinley.

Do you have anything else?

Well, I want to thank Mr. Potter and Mr. Key for being with us today and for your testimony. We look forward to working with you as we attempt to move forward with this legislation.

So, with that, we will conclude today's hearing; and we will have the record will remain open for 10 days for additional material to be submitted, members to ask additional questions.

And with that, thank you very much for being with us.

[Whereupon, at 3:21 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

UNITED STEELWORKERS
UNITY AND STRENGTH FOR WORKERS

Leo W. Gerard
International President

May 31, 2011

The Honorable Steven Chu
Secretary
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

**RE: Re-enrichment at the Paducah Gaseous Diffusion Plant (PGDP)**

Dear Secretary Chu:

For more than 50 years, the Paducah Gaseous Diffusion Plant has enriched uranium for use in America's defense and commercial nuclear reactors. At the present time, the Paducah plant is the only domestic facility enriching uranium for use in commercial reactors, making it a critical component in our nation's energy security infrastructure.

The enrichment process results in two principal products: enriched uranium hexafluoride, which is used for nuclear weapons or fuel for nuclear power plants; and leftover "tails" of uranium hexafluoride.

Tails have been viewed as a waste product because considerable enrichment processing is required to further extract the remaining useful quantities of uranium-235.

We are writing to inquire if the Department of Energy plans to re-enrich the depleted uranium hexafluoride "tails" currently stored at the Paducah, Kentucky facility. Such a re-enrichment effort would have positive fiscal and environmental benefits and present a significant win-win situation for the nation and our members.

There are currently 40,000 DUF6 (depleted uranium hexafluoride) cylinders of "tails" located in Paducah and 20,000 located at Portsmouth. The "tails" are currently scheduled to be converted to a stable chemical form, primarily uranium oxide, at depleted uranium facilities in Paducah and Portsmouth. However, the "tails" contain useable uranium that can be re-enriched by the Gaseous Diffusion plant located in Paducah.

The Paducah Gaseous Diffusion Plant is scheduled to be retired as the USEC Advanced Centrifuge Plant begins fuel enrichment operations. If DOE authorizes a pilot

program for re-enrichment of the tails, it could preserve the 1200 jobs in Paducah, which include 580 USW members, and the 770 D&D cleanup jobs at Portsmouth, Ohio.

Re-enrichment of the tails is economically feasible and could result in at least $1 billion in revenue to the government. Federal funds will also be saved by reducing the amount of tails that must be converted to stable chemical form. In addition, the government will be able to defer costs for shutdown and maintenance of the Paducah plant which is estimated to be $1 million per year.

This program is important for our members' jobs and represents an opportunity to generate needed revenue for the government, revenue that can be used to fund the necessary clean up activities at the site, while at the same time reducing the long term costs of that clean up.

I urge your full consideration for establishing a tails re-enrichment program at the earliest opportunity, and look forward to hearing back from you on this matter.

Sincerely,

Leo W. Gerard

International President

LWG/cdk

COMMONWEALTH OF KENTUCKY
OFFICE OF THE GOVERNOR

STEVEN L. BESHEAR
GOVERNOR

700 CAPITOL AVENUE
SUITE 100
FRANKFORT, KY 40601
(502) 564-2611
FAX: (502) 564-2517

June 10, 2011

The Honorable Ed Whitfield
Chairman, Energy and Environment Subcommittee
Energy and Commerce Committee
2368 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Whitfield:

I am writing in strong support of HR 2054, the Energy and Revenue Enrichment Act of 2011. I commend you for filing such an important bill, and know that you recognize that 1,200 Kentucky jobs are at stake, jobs that keep bills paid and food on the table for 1,200 Kentucky families.

On February 8, 2011, I sent a letter to Secretary Steven Chu requesting that the Department of Energy begin a program to re-enrich depleted uranium hexafluoride "tails" currently stored in Paducah, Kentucky, a program that would provide both fiscal and environmental benefits for Kentucky and the nation. I am disappointed that the U.S. Department of Energy currently has no plans to initiate such a commonsense program. That's why I support your proposed pilot program.

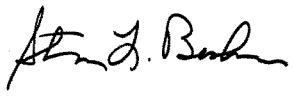
This re-enrichment program represents an opportunity to generate needed revenue for the federal government, revenue that can be used to fund the necessary cleanup activities at the sites in Paducah and Portsmouth, Ohio, while at the same time reducing the long-term costs of that cleanup. According to Government Accountability Office (GAO) estimates in 2008, the net value of the uranium stored at both sites is more than $7 billion, based on 2008 market conditions. By re-enriching a portion of the 40,000 cylinders currently at Paducah and the 20,000 located at Portsmouth, the bulk volume of materials that will ultimately be converted into uranium oxide will be reduced, saving on conversion costs associated with the cleanup and disposal of the cylinders. Such a program as outlined in the legislation would also have no negative effect on commercial uranium prices.

Most importantly, a tails re-enrichment program would extend the life of the existing commercial gaseous diffusion plant in Paducah, keeping 1,200 employees on the job, paying taxes and contributing to the local economy. Every single job is critical during these tough economic times, and your bill deserves the full support of Congress and the Obama administration.

Without a re-enrichment effort, under the Department of Energy's ongoing waste disposal program, these depleted materials will be converted to uranium oxide and discarded – a plan that is both unnecessarily costly and has negative environmental impacts. As the GAO states, storing the tails in their converted form "could prevent the Department of Energy from obtaining the potentially large revenue resulting from sales at currently high uranium prices."

The time to move forward on such an initiative is now. Please let me know how I can assist your efforts to ensure passage of this important bill for the nation and the Commonwealth of Kentucky.

Sincerely,



Steven L. Beshear

cc: Senator Mitch McConnell
Senator Rand Paul
Representative Ben Chandler
Representative Geoff Davis
Representative Brett Guthrie
Representative Hal Rogers
Representative John Yarmuth
Secretary Steven Chu
Deputy Secretary Daniel B. Poneman
Judge Van E. Newberry
Mayor Bill Paxton
Elaine Spalding, President Paducah Area Chamber of Commerce

CITY OF PADUCAH
William F. Paxton III
Mayor
300 South 5th Street
P. O. Box 2267
Paducah, KY 42002-2267
Phone: (270) 444-8530
Fax: (270) 443-5058

June 10, 2011

The Honorable Rand Paul
United States Senate
1100 South Main Street, Suite 12
Hopkinsville, KY 42240

Dear Senator Paul:

Thank you for your strong support of the Tails Legislation. The legislation is important to this area because it would generate revenue for DOE's environmental cleanup and maintain the 1,200 good jobs at the plant.

Re-enriching the depleted uranium tails stored at the Paducah Gaseous Diffusion Plant will help extend operations at the plant and protect 1,200 high-paying jobs that pump nearly $150 million directly into the regional economy every year. PGDP enrichment workers' salaries average $108,000 annually (with benefits), dollars that support every virtually every retail and professional sector of our business community.

For 60 years this community has lived with the stigma of serving as home to millions of tons of DOE's process by-product and now that the tails are recognized to have value, Paducah and the plant employees should be the ones to benefit through an opportunity to extend the operating life of the plant. DOE will pay standard commercial enrichment rates to re-enrich the tails no matter where it is done, so there is absolutely no reason to move the work away from Paducah.

The benefits are:

- The program requires no appropriations- it pays for itself by selling a portion of the feed that's generated to pay for the enrichment.
- The 18-24 month pilot project proposed in Rep. Whitfield's legislation would generate approximately $500 million in federal revenue.
- The total net value of the tails has been calculated to be as much as $4 billion.

Other benefits are:

- **Revenue raiser for the Federal Government.** The enrichment of a measured amount of tails would result in a significant annual net benefit to the USG depending on the quantity and assays of the tails re-enriched.

- **Utilize Paducah while commercially operational.** This is a unique opportunity to utilize the resources of the Paducah plant while it is still operational. When the plant is shut down, the government's opportunity to re-enrich tails becomes significantly more expensive effectively losing the opportunity to recover the valuable uranium.

- **Extend the useful life of the Paducah plant and preserve current jobs.** A robust tails re-enrichment program can make continued operations at Paducah economically viable, extending the life of the plant and protecting jobs at the site.

- **Create and preserve jobs by funding D & D activities.** Enriching tails at Paducah would reduce DOE's costs of ultimately disposing of the depleted uranium and would create a valuable asset, natural uranium or low enriched uranium that could help fund other government needs such as DOE's Environmental Management cleanup program, which includes the gaseous diffusion plants in Paducah, KY., Oak Ridge, TN, and Piketon, Ohio. The combination of tighter federal budgets and increasing uranium prices make this an even more attractive option to fund clean-up activities in the future.

- **Reduce volume of waste.** Re-enriching tails reduces the amount of waste by 30-40% depending on assay level. This reduction enhances environmental benefits and reduces the amount of clean-up and disposal work that DOE must eventually complete, thereby providing additional savings in federal outlays.

Thank you again for your support. If you need additional information, please contact my office at 270-444-8504.

Sincerely,

William F. Paxton
Mayor

Van E. Newberry
*McCracken County Judge Executive*

McCracken County Courthouse
300 South Seventh Street
Paducah, KY 42003-1700
Office: (270) 444-4707
Fax: (270) 444-4731

June 12, 2011

To Whom It May Concern:

We have a rare opportunity in our community to clean up waste, preserve jobs and actually make money for the federal government.

The Paducah/McCracken County community has hosted the Department of Energy's uranium enrichment plant since the early 1950's. A total of 1250 workers are employed at this enrichment facility, which is scheduled for shutdown after new technology is made available. When this plant shuts down, the ripple effect may also shut down the next-door TVA Shawnee Steam plant which supplies electricity to the enrichment plant. This could cause the loss of approximately 300 workers at the TVA site. These two facilities are the flagship manufacturing industries of our region. Many of these workers are from southern Illinois and eastern Missouri.

There are currently 40,000 uranium "tails" cylinders stored at the Paducah site. The Department of Energy has a unique opportunity to re-enrich these tails into commercially valuable natural uranium that would then be sold to generate revenue for the federal government. This operation would extend operations at the enrichment plant and the TVA facility.

This operation requires no funding from the federal government, but could be a source of revenue in these tight budget times.

Since the early 1950's, this community has supported the enrichment of uranium. For almost sixty years this community has been storing this waste for the federal government. Now that the "tails" are recognized to have value, this community should be the one to benefit.

I believe that with Senator Paul's help we can make this happen!

Sincerely,

Van E. Newberry
McCracken County Judge Executive

RAND PAUL
KENTUCKY

United States Senate
WASHINGTON, DC 20510

Senator Rand Paul
Statement for the Record
House Committee on Energy and Commerce, Subcommittee on Energy and Power
Hearing on the *Energy and Revenue Enrichment Act of 2011*

June 16, 2011

Chairman Whitfield and Ranking Member Rush, thank you for the invitation to testify in support of the *Energy and Revenue Enrichment Act of 2011*. While my schedule keeps me in Kentucky today, I appreciate the opportunity to submit this statement and the accompanying documents for the record.

The cleanup of the Paducah Gaseous Diffusion Plant stands among the foremost energy issues affecting Western Kentucky. As the witnesses have no doubt explained, there are currently 40,000 cylinders of depleted uranium hexafluoride, known as "tails," presently sitting onsite in Paducah. The Department of Energy (DOE) has two options for these tails: it can convert them into stable chemical form and spend money on disposal, or it can choose to re-enrich these tails and sell the resulting uranium for a profit.

The *Energy and Revenue Enrichment Act of 2011* would establish a pilot program to facilitate the re-enrichment and sale of the depleted uranium tails. This pilot program would save the taxpayers an estimated $135 million in waste conversion fees, and avoid the environmental impact of waste disposal. The Government Accountability Office recently estimated the net value of the uranium tails to be as much as $4 billion. Any revenue generated by the sale of this re-enriched uranium would then be deposited into the Uranium Decontamination and Decommissioning Fund, dedicated to environmental cleanup at the Paducah site. Even more importantly, an effort by DOE to enrich the tails at Paducah would extend 1,200 jobs that are currently scheduled to terminate.

Put simply, this measure costs the government nothing, generates revenue for cleanup at the Paducah site, and—at a time when unemployment in Kentucky is approaching 10 percent—extends the livelihood of 1,200 site employees.

Over the past six months of my tenure as a United States Senator, I have gotten to know the issues surrounding the site at Paducah and met the people who are devoting their lives to ensuring that the cleanup of the site is timely, economical, and safe. The *Energy and Revenue Enrichment Act of 2011* represents all three of these priorities. Allowing DOE to contract to enrich these tails is the most commonsense solution available to this problem—a win for the taxpayers, and a win for the residents of Paducah.

I am hopeful that DOE will recognize the resources available to it in Paducah and take the steps necessary to ensure a timely decision is made in the best interests of the State and its residents. DOE has had plenty of notice on this issue. Any delay on this decision until it is too late to benefit the site and the individuals who work there would be a grave disappointment to the State and nothing short of a bureaucratic failure on behalf of the agency.

To underscore the importance of this issue to the Kentucky, I have included two letters with my statement. The first is from Bill Paxton, the Mayor of the city of Paducah, and the second is from Van Newberry, McCracken County Judge Executive.

Mr. Chairman, thank you for your dedication to and excellent work on this issue. I would also like to thank Senator Mitch McConnell for introducing the *Energy and Revenue Enrichment Act of 2011* in the Senate. I am proud to be a co-sponsor of this legislation and I appreciate the opportunity to have my statement included in the record.

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